AUTHOR INDEX

A

Abbasy, M. A., 330, 331
Abderhalden, E., 103, 107, 108, 196, 308, 326
Abe, M., 357
Abe, Y., 413
Abraham, E. E. U., 94
Abraham, E. P., 112
Ackermann, D., 211, 219
Ackermann, J., 166, 172
Acree, F., Jr., 481
Adams, G. A., 429
Adams, M., 195, 215, 220, 221, 222
Adams, R., 100
Adams, W. E., 242
Adamson, P. S., 458
Addis, T., 408
Adkins, H., 100
Adler, E., 6, 22, 29, 47, 127, 131, 132, 195, 381
Adler, E. L., 276
Adlersberg, D., 149
Ågren, G., 40, 43, 112, 113
Ahlborg, K., 63
Ahmad, B., 338
Ahmann, C. F., 367, 368
Akabori, S., 116
Akao, A., 211
Akasi, S., 99
Akerren, Y., 399
Akiyama, A., 87
Akiyama, G., 95
Albers, H., 114, 130, 241
Albers, V. M., 423
Alder, K., 92
Alexandrowskaja, N. S., 115
Alexandry, A. K., 199, 409
Allchorne, E., 347
Allen, E., 283, 284
Allen, W. M., 278, 280
Allinson, M. J. C., 222
Allison, F. E., 493
Almquist, H. J., 347, 348
Alphen, A. J. S. van, 174
Alt, H. W., 18
Altschuler, S. S., 149
Alving, A. S., 240
Ambrose, A. M., 478
Amlong, H. U., 518, 521
Ammon, R., 28, 125, 329
Andersag, H., 311
Anderson, A. A., 492, 493
Anderson, A. B., 434
Anderson, D. H., 18, 277
Anderson, E. M., 224, 259
Anderson, I. A., 401
Anderson, J. A., 149
Anderson, R. J., 82, 95, 166, 494, 495
Anderson, R. K., 18
Anderson, W. E., 163
Andes, I. E., 212
Andre, E., 84
Andreae, M., 175
Annau, E., 20, 27, 157
Anselmino, K. J., 179, 406
Anson, M. L., 37, 42, 112, 119, 428, 429
Antaki, A., 153
Aoki, K., 224
Arbuzov, B. A., 450
Archer, N., 157
Armsby, H. P., 355
Arnott, W. M., 157
Arnow, L. E., 29, 104, 107, 119
Artom, C., 28, 169, 171, 174
Asahina, Y., 449, 452
Askew, F. A., 344, 468
Askew, H. O., 362, 367, 368
Asriel, E., 223
Astbury, W. T., 59, 109, 118
Atanasiu, J. A., 125
Aubel, E., 15
Aubertin, E., 401
Auchinachie, D. W., 371
Auhagen, E., 132, 305
Austin, J. H., 234, 239, 246, 427
Avery, G. S., Jr., 516, 517, 524
Axtman, G., 313
Aykroyd, W. R., 319, 340
Aylward, F. X., 171, 177

B

Baars, J. K., 499
Babcy, A. M., 399
Bach, D., 505
Bach, S. J., 153, 192, 400
Bacharach, A. L., 166, 337, 346, 347
Bachman, C., 401
Bachmann, G., 153
Bacq, Z. M., 412, 483
Baer, E., 137, 167
Baev, A. A., 199
Bagdassarjanz, G., 134
Baglioni, S., 165
Bahn, A., 103, 108
Bailey, C. H., 80
Bailey, K., 118, 380
Baird, A., 378
Baker, A. B., 151
Baker, W., 108
Baker, Z., 24
Balassa, G., 428
Baldwin, E., 134, 377
Bálint, P., 427
Ball, E. G., 1, 2, 325
Ball, H. A., 145, 146, 147, 263, 401
Balls, A. K., 37, 43
Balson, E. W., 107
Baltaceanu, G., 414, 485
Baltes, J., 80, 84
Balzer, E., 149
Banaglia, A. E., 147
Bancroft, W. D., 6
Banga, I., 19, 20, 45, 157, 385
Baranowsky, T., 128, 382
Barbour, H. G., 355
Barcroft, J., 238
Barer, A. P., 367
Barger, G., 312
Bargeton, D., 191
Barkan, G., 8, 432, 435
Barker, H. A., 504
Barker, S. B., 144, 150, 155
Barnard, R., 9
Barnes, D. J., 342
Barnes, R. H., 145, 155, 176, 179, 263, 406
Baroni, E., 438, 440
Barott, H. G., 355
Barrenscheen, H. K., 126, 127, 378
Barrett, P. A., 422
Barrie, M. M. O., 346
Barron, E. S. G., 10, 14, 15, 26, 245, 427, 429, 433
Barrows, W. M., 176
Barta, L., 484
Bartley, M. H., 314
Bartoli, A. I., 225
Barton, O. S., 283
Basak, M. N., 191, 370
Bashour, J. T., 413, 414
Basu, K. P., 191, 370
Basu, N. K., 339
Batchelder, C. H., 487

Bates, R. W., 288
Bauer, H., 115, 428
Bauman, L., 414
Baumann, C. A., 157
Baumann, T., 326, 331
Baumberger, J. P., 2
Baumer, L., 115
Baxter, J. G., 335
Beach, E. F., 357
Beadles, J. R., 370, 371
Beard, H. H., 211, 220, 222, 371
Beard, J. W., 115, 116
Beber, A. J., 365
Beck, F. F., 145, 413
Becka, J., 246
Becker, E., 441, 442
Beckh, W., 320
Beeston, A. W., 177, 403, 405
Behre, I. A., 212, 216
Behrens, O. K., 101
Bekhtereva, M. N., 500
Belcher, D., 233, 234, 235, 239, 240
Belding, H. S., 17
Bell, D. J., 66, 377, 399
Bell, M. E., 368
Benard, H., 399, 412
Bender, J. A., 216
Benedict, F. G., 354, 355, 356
Benedict, G. F., 163, 176
Benedict, S. R., 212, 214, 216
Bénévent, M. T., 432, 433
Bennett, L. L., 145, 147
Bennett, M. A., 205
Bennetts, H. W., 367
Benoy, M. P., 26
Bentsáth, A., 332, 442
Benz, F., 6
Béres, T., 438
Berg, B. N., 146, 148, 263
Berg, C. P., 104, 190
Bergel, F., 311, 312, 343, 345
Bergh, A. A. H. van den, 424
Bergman, A. J., 287
Bergman, H. C., 148, 260
Bergmann, M., 41, 52, 101, 102, 110, 111, 116, 117, 428
Bergmann, W., 85
Bergsteinsson, L., 469
Berl, H., 129
Bernal, J. D., 59, 110
Bernardie, A. M. de la, 223
Bernhard, K., 29, 174, 175
Bernhardt, H., 193
Bernhauer, K., 166
Bernheim, F., 9, 19, 195, 429, 431
Bernheim, M. L. C., 19, 429, 431
Bernstein, R. E., 330
Bersin, T., 48
Bessey, O. A., 4, 316
Best, C. H., 152, 402, 406
Beumer, H., 204
Beynon, J. H., 362, 468
Beznák, A., 180
Bezssonoff, N., 1
Biancalani-Schapira, G., 497
Biasotti, A., 118, 145, 147, 152
Biermacher, O., 423
Bill, A. H., 243
Bills, C. E., 341
Binet, L., 191, 412
Bingold, K., 436, 437
Binns, D., 234
Birch, T. W., 318, 319, 325
Bird, H. R., 348
Bird, O. D., 337
Birosel, D. M., 91
Bischoff, F., 118, 151, 152, 242
Bischoff, G., 26
Biscoe, J., 112, 113, 115
Black, A., 366, 369
Blackberg, S. N., 148
Blackie, W. J., 461
Blackwood, J. H., 171, 371
Blalock, A., 412
Blanchard, E., 339
Blanchard, K. C., 24
Blanchard, M. H., 119
Blaschko, H., 28, 201, 202, 442
Blatherwick, N. R., 203, 365
Blazsó, A., 157
Bloch, K., 495
Bloch, W., 192
Block, P. W., 279
Block, R. J., 109, 111, 114, 204, 205, 357
Bloomfield, A. L., 369
Bloor, W. R., 17
Blount, B. K., 442
Blumberg, H., 345
Blunden, H., 152, 153, 192
Boam, J. J., 473
Bock, F., 341
Bodansky, A., 409
Bodansky, M., 211, 213, 219, 220, 221, 223
Bodine, J. H., 18
Bodo, R. C., 147
Boe, H., 69, 73
Böhm, F., 197
Boeker, G. F., 3
Boell, E. J., 18
Bogaert, A. van, 180
Boggess, T. S., 211, 371
Bohstedt, G., 370
Boivin, A., 497
Bol, T., 243
Bolcato, V., 502
Bolliger, A., 216, 217
Bollman, J. L., 176, 405, 406, 407, 414
Bond, C. B., 28
Bonhoeffer, K. F., 173
Bonner, J., 313, 517, 522
Bonnet, R., 199, 222
Booher, L. E., 316, 320
Boon, W. R., 100
Boothby, W. M., 195, 215, 220, 221, 222
Boppel, H., 54
Borchardt, H., 268
Bordet, P., 498
Borei, H., 129
Borgen, D. R., 411
Borsook, H., 1, 25, 39, 211, 325, 326
Borst, M., 424
Borst, W., 220, 221
Bosshard, W., 266
Bost, G., 2
Bosworth, A. W., 90
Bottazzi, P., 354
Bouillenne, R., 523
Boulanger, P., 44, 133, 318, 440
Bowman, K. M., 151
Boxer, G., 118
Boy, G., 199
Boyd, E., 355
Boyd, E. M., 166, 170, 184
Boyd, W. J., 99
Boyland, E., 23
Boyland, M. E., 23
Boysen Jensen, P., 514, 516, 517, 519, 520, 522, 526
Bracket, J., 16
Bradfield, A. E., 457, 458
Bradford, J. A., 486
Braestrup, P. W., 220
Brand, E., 204, 205
Brandt, C. W., 462
Brandt, R., 292

Branke, Y. V., 78
Bratzler, J. W., 369
v. Braun, J., 101
Brauner, L., 519
Brauns, F., 68
Braunstein, A. E., 27, 189, 196, 387
Brdička, R., 2, 12, 431
Bredereck, H., 139
Breirem, K., 355
Brentano, C., 175, 222
Breusch, F. L., 21, 169, 387
Bridge, W., 475
Briggs, A. P., 125
Briggs, L. N., 461
Brinkman, R., 429
Briskas, S. B., 411
Britton, S. W., 146, 149, 261, 401
Brocklesby, H. N., 87
Brockmann, H., 341
Broh-Kahn, R. H., 155
Brooks, C. M., 147
Brooks, J., 10, 429
Brosteaux, P., 156, 437
Browman, L. G., 269
Brown, A., 342
Brown, C. F. G., 415
Brown, H. B., 205, 244
Brown, J. B., 92
Brown, R., 497
Brown, R. W., 27, 499, 500
Brown, W. R., 361
Browne, F. A., 342
Browne, J. S. L., 274, 278, 279, 280, 282
Bruckner, V., 104, 157, 190, 442
Bruhn, M., 237, 247
Brull, L., 243, 363
Brunel, A., 200
Brunner, O., 438, 439, 440
Brunquist, E. H., 240
Brunton, C. E., 245
Bryan, A. H., 17
Brydowna, W., 103
Buchman, E. R., 312
Buchmann, W., 483
Buchy, M. T., 199
Buckingham, D. E., 478
Bühler, F., 184
Bülbring, E., 259
Buell, M. V., 401
Büter, H., 84
Bull, H. B., 119, 163
Bumann, I., 52
Bunting, R. W., 243
Buogo, G., 125
Burch, C. R., 335
Burch, W. J. N., 139
Burdett, 347
Burk, D., 23, 508
Burkholder, P. R., 520, 524
Burlet, E., 515, 518, 522
Burmester, B. R., 424
Burns, W., 191, 392
Burr, G. O., 361, 365
Burr, H. S., 283, 284
Burrows, H., 258
Burrows, W., 493
Burton, A. C., 176
Busbey, R. L., 484
Busse, A., 341
Buston, H. W., 71
Busztin, A., 117, 205
Butenandt, A., 266, 272, **278, 473, 476, 477**
Butler, G. C., 253, 257, 289
Butter, G., 467
Button, L. L., 332
Butts, J. S., 152, 153, 175, 192, 263
Buy, H. G. du, 518, 520, 526

C

Cachin, M., 414
Cahill, G. F., 204, 205
Cahn, R. S., 473, 477
Calfee, R. K., 487
Califano, L., 20, 28, 175
Callaway, J. W., 151
Callow, R. K., 258, 268
Calvery, H. O., 115, 117
Cameron, A. E., 107
Cameron, A. T., 211
Cameron, D. E., 148
Campbell, E. H., 144
Campbell, F. L., 483
Campbell, J., 406
Campbell, K. R., 223
Campbell, W. G., 72
Campion, J. E., 340
Cannan, R. K., 108
Cantarow, A., 415
Canzanelli, A., 18
Cape, J., 242
Cardoso, D. M., 214
Cardoso, H., 92
Carling, H. F., 371
Carothers, W. H., 56
Carpenter, T. M., 154, 155
Carr, C. J., 145, 413, 415
Carrié, C., 423, 424, 435
Carrodus, A., 216, 217
Carroll, W. E., 371
Carter, C. W., 315
Carter, H. E., 99, 100
Cartland, G. F., 259, 285
Cason, J., 494
Castagnou, E., 401
Castle, D. C., 338
Castle, E. S., 519
Catchpole, H. R., 112, 287
Catherwood, R., 225
Cattaneo, C., 16
Cattell, McK., 390
Caujolle, F., 413
Cavanaugh, C. J., 264
Cavett, J. W., 115
Cedrangolo, F., 27, 400
Chabrol, E., 413, 414
Chaikoff, I. L., 153, 154, 156, 177, 179, 360, 401, 403, 404, 406
Chaix, P., 25, 26, 501
Chaleil, 413
Challinor, S. W., 68
Chamberlain, F. E., 485
Chamberlin, P. E., 153
Chamberlin, T. E., 180
Chambers, L. A., 40
Chambers, W. H., 144, 155
Chamorro, A., 277
Chandler, J. P., 144
Chandler, W. L., 496
Channon, H. J., 176, 177, 183, 402, 403, 404
Chanutin, A., 199, 222
Chapman, E. E., 244
Chapman, F. E., 367
Char, T. L. R., 1
Charipper, H. A., 293
Chase, A. M., 439, 440
Chase, E. B., 367
Ch'en, G., 276, 282
Cherry, I. S., 145, 153, 400, 412
Chevalier, J., 477
Chevallier, A., 410
Chibnall, A. C., 106, 194
Chick, H., 314, 318
Chittenden, R. H., 348
Cholnoky, L. v., 211, 442
Cholodny, N., 516
Choron, Y., 410
Chou, C., 268
Chow, B. F., 119
Christeleit, W., 104
Christensen, J. T., 279
Christian, W., 27, 44, 46, 47, 127, 130, 132, 133, 381, 383
Christman, C. C., 7

Chuc, R., 410
Church, C. F., 155
Ciaccio, C., 211
Ciaccio, I., 211
Ciaranfi, E., 407
Cichocka, J., 118
Clar, G., 459
Clark, A. J., 18, 191, 392
Clark, A. R., 290
Clark, D. E., 176
Clark, D. G., 493
Clark, E. P., 473, 475, 476, 483, 484
Clark, G. L., 59, 110
Clark, H. E., 106, 194
Clark, H. M., 346
Clark, J. H., 119
Clark, P. J., 485
Clark, R. H., 26
Clark, W. C., 517
Clark, W. M., 232, 233
Clarke, H. T., 103, 340
Clarke, W. A., 424
Clarkson, S., 365
Claude, A., 116
Clemmensen, S., 339, 340
Clifton, C. E., 194, 503, 507
Cline, J. K., 310
Clowes, G. H. A., 17
Clutterbuck, P. W., 320
Clutton, R. F., 100
Cohen, E., 434
Cohen, E. J., 108
Cohen, P. P., 191
Cohen, R. A., 16
Cohen, S., 114, 492, 497, 498
Cohen, S. L., 273, 274
Cohen-Solal, G., 270, 280
Cohn, E. J., 119
Colacresi, A., 240
Colbert, C. N., 309
Cole, H. H., 285
Cole, H. I., 92
Collip, J. B., 143, 224, 269, 271, 280, 287, 288, 289
Colowick, S. P., 129, 138
Colp, R., 413
Combette, R., 115, 118, 427, 430
Connel, W. F., 170
Conner, H. A., 504, 507
Conrad, R. M., 104, 190
Conway, E. J., 199
Cook, A. H., 422, 442
Cook, J. W., 258, 273
Cook, R. P., 25, 27, 407
Cooke, R., 199
Cope, O., 145
Copping, A. M., 314
Corbet, R. E. A., 336
Corcoran, A. C., 164, 170
Cordes, H., 521
Corey, E. L., 145, 264, 401
Corey, R. B., 116, 119
Cori, C. F., 129, 138, 392
Cori, G. T., 129, 138, 144, 145, 146, 392
Corl, C. S., 483
Corley, R. C., 191
Corner, G. W., 282
Cornil, L., 399
Cortese, F., 413
Cortis-Jones, B., 431, 433, 434
Corwin, W. C., 150
Coryell, C. D., 11, 111, 425, 426
Cottet, J., 413, 414
CoTui, F. W., 147
Couderc, A., 451
Courrier, R., 270, 280
Courtial, J., 412
Coward, K. H., 338
Cowgill, C., 309
Cowgill, G. R., 364, 365, 370
Cox, G. J., 356
Craig, F., 15
Craig, L. C., 104, 487
Crandall, L. A., Jr., 145, 153, 400, 410, 412
Creighton, H. B., 524
Crocker, W., 524
Cross, M. C. A., 401
Crowder, J. A., 495
Crowfoot, D. M., 422
Cruickshank, E. W. H., 191, 392
Crumpler, T. B., 125
Cruz, A. O., 80
Cullen, E., 233
Cullen, G. E., 232, 233, 234, 236, 239, 246
Culver, J. D., 17
Cunningham, B., 107
Currie, D. W., 347
Curtis, J. M., 275
Cushing, H., 290
Cuthbertson, D. P., 154, 360
Cutler, C. H., 152
Cutuly, E., 269, 284, 285
Cutuly, E. C., 269, 284, 285
Czaja, A. T., 518
Czarnetsky, E. J., 25

D

Da Costa, E., 364
Daft, F. S., 198, 360, 408, 411
Daggs, R. G., 152, 332
Dagys, J., 525
Dallemagne, M. R., 246
Dalton, A. J., 407
Dalton, J. B., 108
Daly, C., 236
Dam, H., 341, 347
Damansky, A. F., 64
Dambrosi, R. G., 145
Daniel, E. v., 438
Danielson, J. S., 216
Danielson, W. H., 234
Dann, M., 144, 155
Dann, W. J., 317, 318, 319
Dannenberg, H., 266
Dantes, A., 153
Darby, H. H., 340
Darby, W. J., 319
Das, N. B., 19, 20
Das Gupta, S. M., 338
Davenport, H. W., 1, 325, 326
Davidson, C. S., 264
Davidson, G. F., 57
Davies, A. W., 339
Davies, H., 493
Davis, H., 284
Davis, J. E., 15, 355
Davis, M. E., 285
Davis, W. R., 81, 92
Dawson, M. H., 496
Day, P. L., 319
Deanesly, R., 267
Debrue, G., 245, 246
Decherd, G. M., Jr., 213, 214, 218
De Eds, F., 125, 485
Deighton, T., 355
Delory, G. E., 125
Delp, M., 152
De Lucia, P., 400
Delvaux, E., 79
De Moura Campos, F. A., 354
Dempsey, E. W., 270, 276, 279, 280
Dengel, F., 101
Dennig, H., 242, 368
Dennison, M., 266, 269
Dent, C. E., 422
Deppe, M., 272
Deren, M. D., 149
Dermer, L., 399, 412
Derr, R. B., 486
Derr-Kaltenbach, H., 409

Desnuelle, P., 114, 440, 441
Deuel, H. J., Jr., 152, 153, 156, 157, 175, 176, 262, 403, 405
Deulofeu, V., 100, 118, 152
Deuticke, H. J., 135, 380, 390
Dewan, J. G., 22, 27, 387, 388, 389
Dewar, M. M., 242
Dezelic, M., 423
Dhéré, C., 423, 425, 442
Dickinson, S., 118, 238
Dieckmann, H., 241
Diels, O., 92
Dietrich, H., 26, 467, 468
Dijkman, M. J., 519, 520
Dill, D. B., 236, 245, 394
Dill, D. H., 242
Dillon, R. T., 105
Dine, W. C., 17
Dinelli, D., 437
Dingemanse, E., 267, 268
Dirr, K., 180
Dirr-Kaltenbach, H., 190, 195, 196
Dirscherl, W., 273
Dische, Z., 23, 129, 382
Dixon, H. H., 117
Dixon, J. K., 362, 367, 368
Dixon, K. C., 23, 25, 27
Dixon, M., 29
Dixon, T. F., 361, 362
Dobriner, K., 424
Dodds, E. C., 273
Dohan, F. C., 263
Doisy, E. A., 274, 275, 289, 290
Dole, M., 234
Dolk, H. E., 519, 520
Dolkart, R. E., 415
Dols, M. J. L., 342
Dore, W. H., 53, 62
Dorfman, R. I., 268, 275
Dostál, R., 523
Doster-Virtue, M. E., 413
Doubilet, H., 413
Dounce, A. L., 7, 37, 48, 112, 430
Drabkin, D. L., 150, 427
Dragstedt, L. R., 180, 404
Drake, N. L., 469
Drake, T. G. H., 342
Dramburg, K., 29, 507
Drastich, L., 242
Dratvina, T. V., 503
Drieux, H., 332
Drill, V. A., 155
Drobintzeva, A. V., 245
Drumm, P. J., 329
Drummond, J. C., 337, 343, 344, 345
Drury, D. R., 148, 155, 176
D'Silva, J. L., 409
DuBois, D., 238, 246
Dubos, R., 212, 217, 496, 506
Dubouloz, P., 437
Ducceschi, V., 165
Duff, V. B., 213, 219, 221, 223
Dukes, H. H., 355
Dunlop, D. M., 157
Dunn, M. S., 107, 152, 192
Du Noüy, P., 233
Durichen, W., 235
DuShane, G. P., 290
Dutt, S., 79
Du Vigneaud, V., 101, 191, 198
Dworaczek, E., 126, 378
Dye, J. A., 148
Dyer, H. M., 191
Dziengel, K., 51

E

Eagle, H., 42, 117, 118
Earle, I. P., 233
Earwicker, G. A., 107
Eaton, M. D., 8
Ebbecke, U., 390
Ebihara, T., 326
Echevin, R., 200
Eck, J. C., 341
Eckhardt, B., 182
Eckhardt, M., 191
Eckstein, H. C., 177, 357, 403, 404
Eddy, C. W., 125
Edgar, C. E., 314, 316, 317, 318, 319
Edisbury, J. R., 338
Edlbacher, S., 103, 193, 196, 434
Edmund, C., 339, 340
Edsall, J. T., 108
Edson, N. L., 195, 201
Edwards, H. T., 242, 245, 309, 394, 395
Eekelen, M. van, 9, 326
Effkemann, G., 170, 406
Eggleton, M. G., 379
Eggleton, P., 241, 379
Ehmann, L., 468
Ehrhard, P., 214
Ehrismann, O., 29, 507
Ehrlich, F., 73
Eichbaum, F., 289
Eichelberger, L., 378
Eisenman, A. J., 240, 241
Elder, J. H., 283
Eldridge, M., 266, 269
Eliot, M. M., 342
Ellinger, P., 319, 320
Elliott, K. A. C., 26
Ellis, B. A., 84, 85
Ellis, E. L., 25
Ellis, M., 371
Ellis, N. R., 86
Ellison, E. T., 346
Ellison, J. B., 339
Ellisor, L. O., 486
Elmby, A., 332
Elvehjem, C. A., 21, 198, 314, 315, 317, 319, 348, 367, 368, 370, 371, 411, 434, 488
Embden, G., 135, 390
Embree, N. D., 335
Emerson, G. A., 343, 345
Emerson, O. H., 343, 344
Emery, F. E., 264, 276
Emmens, C. W., 268
Emmerie, A., 9, 318, 326
Emmett, A. D., 337
Emödi, G., 15
Endermann, F., 422
Engel, C., 48
Engel, G. L., 135
Engelhardt, V. A., 199
Engle, E. T., 282, 283, 285
Ensor, C., 154
Eppright, E. S., 368
Epstein, E., 182, 183
Epstein, H., 179
Eras, E., 502
Erb, C., 501
Erichson, W. E., 340
Erickson, C. C., 198, 411
Eriksen, T. S., 22, 132, 195
Eriksson-Quensel, I.-B., 115
Erxleben, H., 515, 524
Espersen, T., 220
Espy, L., 410
Esselen, W. B., 340
Essex, H. E., 148, 396
Euler, H. v., 6, 22, 46, 47, 127, 130, 131, 132, 195, 305, 316, 317, 319, 381, 440
Euler, U. S. v., 19
Eusebio, T., 41

Evans, B. D. F., 320
Evans, E. A., Jr., 172
Evans, E. I., 287
Evans, G., 263
Evans, H. M., 285, 293, 315, 316, 317, 343, 345
Evans, M., 212, 216
Evans, N. M., 308
Evans, W. C., 455
Evelyn, K. A., 274, 436
Exton, W. G., 149
Eyrard, A., 371
Eysenbach, H., 21, 385

F

Faber, E. R., 522
Fairbanks, B. W., 362
Fairman, E., 411
Famiani, V., 165
Familari, S., 240
Farmer, E. H., 90
Farr, L. E., 170, 364
Farran, M., 309
Farrell, J. I., 486
Farrow, F. D., 64
Faure, M., 495
Faust, K., 453
Fazekas, J. F., 144, 146, 147, 150, 152
Feit, H., 390
Feldman, J. B., 340
Feldman, M., 413, 415
Feldmann, L., 100, 214
Felix, K., 111, 115, 118, 190, 195, 196, 200, 409
Fellers, C. R., 340
Felsing, W. A., 11
Fenn, W. O., 379
Ferguson, J. H., 238
Ferguson, J. K. W., 429
Ferguson, L. K., 415
Fernholz, E., 344
Ferro-Luzzi, G., 216
Fetcher, E. S., 3, 5
Fevold, H. L., 281, 283, 284, 286
Fiedler, H., 514, 516, 518, 522
Field, J., II, 17
Fierens, B., 165
Fiessinger, N., 399, 412
Fildes, P., 492, 494
Filitti-Wurmser, S., 2
Filmer, J. F., 362, 367
Finch, G., 283
Fingerling, G., 358
Fink, D. E., 477
Fink, H., 423, 424, 442
Finkelstein, J., 310
Finkle, I. I., 493
Finkle, P., 330, 331
Firor, W. M., 280
Fischer, E., 441
Fischer, F. G., 21, 385, 450
Fischer, H., 102, 421, 422, 423, 433, 435, 436, 437, 498
Fischer, H. O. L., 100, 137, 167
Fischer, J. H., 26
Fischer, K., 460
Fischer, M., 9, 326
Fischer, W. H., 267, 278
Fischnich, O., 517, 524
Fisher, A. M., 152
Fisher, R. B., 211, 214, 218, 220, 308
Fishman, J. B., 190
Fiske, C. H., 125
Fitting, H., 526
Fitzgerald, M. E. H., 273
Fitzhugh, O. G., 264
Flaschenträger, B., 130, 174, 175
Fletcher, J. P., 149, 401
Flock, E. V., 176, 405, 406, 407
Flosdorf, E. W., 116
Fluhmann, C. F., 282
Fodor, A., 109
Forbes, E. B., 366, 369
Forbes, W. H., 236
Ford, F. J., 244
Forsgren, E., 164
Foster, E. O., 94
Fourie, P. J. J., 423, 442
Fouts, P. J., 315, 319
Fowler, W. M., 367
Fox, H., 290
Fox, H. M., 24
Fox, S. W., 108
Fraenkel-Conrat, H., 102, 116
Frank, F. C., 109
Frank, R. T., 267, 282
Franke, F. E., 486
Franke, W., 28
Franklin, K. J., 412
Frazer, A. C., 169
Frazer, J. P., 332
Fred, E. B., 29, 499, 500, 508
Fredericia, Z. J., 314
Freed, S. C., 275, 276
Frei, P., 440
Fremery, de, P., 253
French, L. R., 369
French, R. B., 370
Freud, J., 267
Freudenberg, K., 52, 54, 61
Frey, C. N., 340
Freyberg, R. H., 358, 365
Friderichsen, O., 339
Friedemann, T. E., 175
Friedgood, H. B., 284
Friedman, A. H., 103
Friedman, M. H., 280
Friedrich, K., 52
Friedrich, W., 422
Fries, J. A., 355
Fries, N., 314
Frisell, E., 331
Fritschi, U., 73
Fromageot, C., 2, 25, 26, 492, 501, 507
Frost, D. V., 317
Frühling, G., 244
Fruton, J. S., 41, 101, 102
Fry, E. G., 145, 263
Fuchs, H., 108, 211
Fürth, O., 29, 359
Fujimoto, T., 233, 244
Fujita, A., 326
Fukase, T., 401
Fulmer, E. I., 500, 503
Funk, C., 317
Funk, I. C., 317
Furgason, W. H., 153, 180
Furter, M., 469

G

Gaarenstroom, J. H., 259
Gabbe, E., 9, 326
Gabbrielli, M. C., 16
Gaddie, R., 18, 191, 392
Gahan, J. B., 485
Gale, E. F., 194, 505, 508
Gallagher, T. F., 268, 269, 271, 275
Galvao, P. E., 156, 308
Gamble, J. L., 246, 247
Ganchev, G., 370
Garbutt, H. R., 259
Garrigus, W. P., 371
Garvin, T., 275
Gaudin, O., 483
Gaunt, R., 264, 288
Gavrilow, N. I., 114
Gawrychowa, M., 11
Gebauer, A., 192
Gegerson, H. J., 290
Geiger-Huber, M., 515, 518, 522
Gemmill, C. L., 25, 391

Genther, J., 226
George, S. W., 475, 476
Georgi, F., 150
Gerard, R. W., 16, 135, 157
Gerendás, M., 442
Gerischer, W., 132
German, B., 119
Gerritz, H. W., 126
Gerschman, R., 409
Gersdorff, W. A., 477
Gesell, R., 244
Ghantus, M., 150, 153
Ghosh, B. K., 309
Ghosh, J. C., 1, 14
Giacomello, G., 463
Gibaylo, K., 130
Gibbs, G. E., 179, 406
Giliberti, P., 218
Gillam, A. E., 338, 437, 457
Gillaspie, A. G., 429, 431
Giroud, A., 332, 410
Gittings, J. C., 218, 226
Gjessing, R., 206
Gladstone, G. P., 492, 493
Glass, V., 505
Gleim, P., 421
Gleim, W., 22, 47, 316
Glick, D., 48, 332
Glynn, W. E., 347
Gnädinger, C. B., 483
Goebel, W. F., 73
Göpfert, K., 199
Goergens, C., 272
Göthlin, G. F., 331
Goetsch, C., 278
Goettsch, E., 364
Goettsch, M., 379
Goiffon, R., 413
Gojcher, B. F., 240
Goldberg, M. W., 266, 464, 469
Goldberger, J., 348
Goldfelder, A., 19
Goldhammer, H., 292
Goldstein, S. W., 79
Gol'gfarb, Y. L., 488
Gomez, E. T., 287, 288
Gontzea, I., 215, 219, 224, 408
Goodale, G. D., 82
Goodell, M., 152
Goodhue, L. D., 485
Goodman, J. G., 177
Gorbach, G., 506
Gordon, A. S., 293
Gordon, R. E., 497
Gordon, W. G., 190
Gorter, A., 199
Gorter, E., 119
Goss, H., 366, 369
Gothe, I., 179
Goto, S., 105, 190
Gottlieb, H., 412
Goudsmit, A., Jr., 217
Goudsmit, J., 309, 312
Gould, S. E., 149
Goulding, A. M., 39
Graber, P., 437
Graham, S., 244
Graham, W. R., Jr., 153
Grant, R., 402
Grant, R. L., 358
Grassmann, W., 108, 109
Grattau, J., 26
Gray, E. L., 335
Gray, P. A., 152
Greaves, J. D., 415
Greeley, P. O., 143, 149
Green, A. A., 119, 236
Green, D. E., 17, 19, 22, 27, 156, 203, 387, 388, 389, 442
Green, T. G., 87, 91, 94
Greenberg, D. M., 366
Greenblatt, M., 18
Greene, C. H., 243, 399
Greene, H. S. N., 243
Greene, R. A., 94
Greengard, H., 414
Greenhill, A. W., 194
Greenstein, J. P., 101
Greep, R. O., 281, 283, 284, 286
Greig, M. E., 26
Greulich, W. W., 268
Greville, G. D., 23
Griese, A., 127, 130, 132
Griffith, H. D., 339
Griffith, W. H., 205
Grotepass, W., 424, 437
Grover, L. H., 486
Grubb, W. J., 451, 452
Grünbaum, A., 205
Gruzewska, Z., 414
Gualtierotti, T., 408
Guelin-Schedrina, A., 399
Günther, G., 22, 47, 381
Guerrero, T. H., 100
Guggenheim, M., 201, 202
Guidetti, E., 486
Guilbert, H. R., 339, 366, 369
Guittonneau, G., 371
Gupta, M. P., 79
Gurin, S., 106
Guthke, J. A., 382
Guthrie, J. S., 211
Gutt, E. F., 78
Guttenberg, H. von, 526
György, P., 314, 319, 320
Gyoku, H., 246

H

Haag, H. B., 478
Haagen-Smit, A. J., 313, 515, 524, 525
Haas, E., 4, 45, 434
Haas, P., 139
Haberland, H. W., 436
Haberland, R., 422
Haberlandt, G., 519, 520
Háda, A., 211
Hagedorn, H. C., 152
Hahn, A., 391
Hahn, L., 171
Hahn, P. F., 411
Haines, R. T. M., 337
Halbach, H., 436
Hald, P. M., 241
Haldi, J., 154
Halenz, H. F., 411
Hall, B. E., 218, 226
Hall, B. V., 276
Hall, H., 341
Hall, K., 266, 269
Hall, V. E., 17, 153, 180
Haller, H. L., 476, 477, 479, 480, 481, 482
Halliday, N., 315, 316, 317
Hallman, L., 156
Hallman, L. F., 153, 157, 175, 262, 403, 405
Halpin, J. G., 315
Hamano, S., 337
Hamblen, E. C., 279
Hamer, P. L., 71
Hamilton, J. B., 269, 270, 271
Hamilton, M., 379
Hamilton, T. S., 358, 369, 370, 371
Hammarsten, E., 40, 43, 112, 113
Hammarsten, O., 130
Hammond, J., 289
Hamon, V., 233
Hampel, C. W., 150, 153
Hamsik, A., 427
Handelsman, M. B., 399
Hanes, C. S., 63
Hanisch, I., 266
Hanke, G., 414
Hanke, M. E., 105
Hanmer, H. R., 486
Hansberry, T. R., 487
Hansen, A. E., 170, 361

Hanson, H., 196
Harington, C. R., 100
Hariss, Z., 180
Harkins, W. D., 110
Harkness, E. V., 274
Harlan, W. R., 486
Harlow, E. S., 486
Harms, H. P., 404
Harrer, C. J., 7, 16, 327, 410
Harris, L. J., 107, 312, 314, 318, 319, 325, 326, 328, 330, 331, 339, 340
Harris, T. N., 42
Harrison, D. C., 328
Harrop, G. A., 259, 264
Hart, E. B., 198, 315, 348, 368, 370, 371
Hart, P. D'A., 434
Hartman, A. F., 241
Hartman, C. G., 271, 283
Hartman, F. A., 259, 292
Hartman, H., 242
Hartmann, A., 467, 468
Hartree, E. F., 7, 9, 12, 190, 191, 428, 429, 431, 432
Hartzell, A., 483
Harvey, H. I., 348
Hasama, B. I., 412
Hasch, Z., 180
Hassan, A., 319
Hasse, Z., 28
Hassid, W. Z., 62, 496
Hastings, A. B., 4, 21, 232, 233, 234, 235, 236, 237, 238, 239, 240, 242, 243, 316, 378
Hathaway, M., 371
Hatz, E. B., 243
Haugaard, C., 238
Haurowitz, F., 2, 12, 422, 425, 427, 431
Hausberger, F. X., 180
Hausen, S. v., 508
Hausser, K. W., 423
Havard, R. E., 238
Havemann, R., 10
Hawes, E. R., 236
Hawley, E. E., 332
Haworth, R. D., 82
Haworth, W. N., 53, 55, 59, 61, 62, 63, 64, 65, 66, 67, 68, 70, 71, 72, 325
Hayami, Y., 170
Haymaker, W., 259
Hayman, J. M., Jr., 216
Hays, H. W., 146, 261, 263
Hazay, L., 243
Heath, C. W., 360
Hecht, G., 309
Hecht, S., 439
Hecht, U., 328
Hedge, D. J., 457
Heffter, J., 390
Hegnauer, A. H., 392
Heidelberger, M., 73, 115, 290, 496
Heidermanns, C., 125
Heilbron, I. M., 338, 437, 468
Heilmeyer, L., 436
Heiman, A. D., 155
Heinbecker, P., 148
Heinemann, M., 326
Heinsen, H. A., 105, 192, 193
Heise, R., 192, 196, 197
Heiting, H., 391
Heiwinkel, H., 22, 47, 131
Hektoen, L., 290
Helberger, J. H., 422
Heller, V. G., 368
Hellerman, L., 25, 391
Hellinga, G., 517
Hellström, H., 6, 22, 47, 381, 423
Helmer, O. M., 315, 319, 413
Helz, G. E., 90
Hempleman, L. H., 2
Henriques, O. M., 236
Henry, J. S., 279
Henry, K. M., 340, 370, 371
Henstell, H. H., 222
Hepburn, J. S., 86
Herbain, M., 399
Herbert, R. W., 325, 326
Herbst, R. M., 103
Hercik, F., 115
Hermann, S., 503
Herrick, J. F., 148, 396
Herriott, R. M., 37, 39, 40
Herrmann, C. L., 219, 223
Herrmann, G., 213, 214, 218
Hertz, R., 270, 277, 279
Hess, K., 51, 53, 55, 61
Hesselberg, C., 289
Hester, H. R., 176, 407
Heuser, G. F., 368
Hevesy, G., 171
Hewitt, L. F., 118, 199
Heyes, R. G., 474, 475
Heymann, W., 343, 411, 415
Heyn, A. N. J., 515, 518
Heyningen, W. E. van, 128
Hibbert, H., 68
Hickman, K. C. D., 335
Hientsch, B., 358
Higginbotham, R. S., 64
Higounet, H., 238
Hilditch, T. P., 77, 82, 86, 87, 91, 94, 166, 167, 407
Hill, E. S., 2, 495
Hill, L. E., 347
Hill, N. G., 330, 331
Hill, R., 429, 430
Hill, R. T., 284, 298
Hill, S. E., 234
Hiller, A., 217, 240
Hills, G. M., 307
Himemoto, T., 8, 432
Himwich, H. E., 144, 146, 147, 150, 151, 152, 222, 246
Hinman, W. F., 365
Hinsberg, K., 28, 125, 329
Hirai, S., 409
Hirano, S., 266
Hirata, Y., 399
Hirohata, R., 115
Hirsch, L., 399
Hirschmann, H., 272
Hirst, E. L., 63, 66, 68, 70, 72, 325, 326
Hisaw, F. L., 281, 282, 283, 284, 286
Hitchcock, A. E., 524
Hitchcock, D. I., 233
Hitchcock, F. A., 259
Hiwatashi, Y., 212
Hochfeld, H. A., 401
Hodgson, T. H., 409
Hoehn, W. M., 253, 254, 256, 257
Hoelzel, F., 364
Hörburger, W., 423, 442
Hoesch, H., 423
Hofer, J. W., 132, 156, 305
Hoffmann, F., 179, 265, 406, 442
Hoffmann, P., 180
Hofmann, H. J., 102, 423
Hofmann, K., 463, 464, 469
Hogan, A. G., 320
Hogden, C., 226
Hogness, T. R., 10, 427
Hohlweg, W., 269, 270, 277

Hojo, Y., 169
Holden, H. F., 429
Holden, M., 328
Holiday, E. R., 106, 492
Holmes, E., 401
Holmes, E. G., 153, 192, 400
Holmes, H. N., 336
Holmgren, H., 164, 407
Holt, L. E., 177
Holter, H., 117
Holtom, G. F., 179, 401, 406
Holton, W. B., 90
Holtz, P., 25, 103, 192, 196, 197, 326
Holtzman, J., 117
Holwerda, K., 169
Hongo, Y., 218
Hoobler, S. W., 366
Hooker, C. W., 268
Hooker, S. B., 119
Hoops, L., 460
Hoover, A. A., 343, 344, 345
Hoover, S. R., 493
Hopkins, F. G., 326
Horowitz, N. H., 17
Hosek, M., 523
Hoshino, S., 118
Hosking, J. R., 462
Hoskins, W. T., 469
Hosoya, S., 493
Hotchkiss, R. D., 73
Houssay, B. A., 143, 145, 147, 409
Hove, E., 368
Howell, S. F., 119, 432
Howland, J. W., 198
Hradil, G., 425, 442
Hrubetz, M. C., 148
Hrübner, H., 156
Hubbell, R. B., 363
Huber, K., 455
Hubner, H., 319
Hübner, H., 262, 438
Hückel, W., 454
Huffman, H. M., 25
Huggins, M. L., 110, 339
Huguenin, R., 244
Hulst, L. A., 437
Hume, E. M., 337
Hunsberger, A., Jr., 415
Hunt, D. J., 315, 318, 319
Hunt, G. E., 371
Hunt, M., 101
Hunter, A., 105
Hunter, F. R., 25
Hurtado, A., 245
Husemann, E., 54, 67
Huszak, S., 13
Hutchins, W. D., 83

I

Ichaporia, M. B., 82
Ierusalimsky, N. D., 500
Iliff, A., 354
Imai, T., 310
Imanaga, H., 25
Imboden, M., 341
Inagaki, T., 402
Ingle, D. J., 260, 265
Inhoffen, H. H., 272
Innes, J. M., 23, 386
Innes, J. R. M., 343
Insko, W. M., Jr., 368
Irvin, J. L., 99
Irvine, J. C., 61
Irving, G. W., 198
Irving, L., 15
Irwin, M. H., 165
Isgur, B., 340
Isherwood, F. A., 66, 70
Ishidate, M., 452, 453
Ishii, Y., 94
Ishiyama, T., 116
Isler, O., 468
Ito, N., 197
Itoh, R., 26
Ivánovics, G., 104, 190
Ivy, A. C., 414

J

Jachimowicz, T., 127, 130, 378
Jackson, C. M., 358
Jackson, R. W., 190
Jacob, A., 101, 396
Jacobs, H. R., 15, 118
Jacobs, W. A., 104, 468
Jacobsen, R. P., 469
Jacobsohn, K. P., 505
Jacobsson, B. J., 501
Jacquot, R., 195
Jamieson, G. S., 81, 83, 90, 94
Janicki, J., 2
Janke, A., 194, 500, 508
Janker, R., 412
Jankowski, H., 181
Jankowski, Z., 11
Janot, M., 462
Jansen, B. C. P., 312
Javicoli, I., 354
Jeans, P. C., 339
Jeffreys, C. E. P., 1, 325, 326
Jeghers, H., 339, 340
Jeker, L., 168
Jellinek, E. M., 239
Jemtegaard, L. M., 151
Jendrassik, L., 125
Jenkins, G. I., 110
Jenkins, G. L., 79
Jenkins, G. N., 176, 404
Jensen, N., 152
Jerchel, D., 28
Jervis, G. A., 204
Jeuse, R. M., 342
Joffe, P. M., 309
Johlin, J. M., 152
John, W., 345
Johnson, F. H., 29
Johnson, P. E., 320
Johnson, R. E., 309, 395
Johnson, R. M., 146, 259
Johnson, S. J., 497
Johnson, S. M., 216
Johnson, S. W., 326, 327, 330, 331
Johnson, W. A., 20, 21, 26, 27, 157, 173, 193
Johnston, E. S., 520
Johnston, J. A., 354, 360, 364
Jolliffe, N., 309
Joly, J. M., 164
Jonatte, D., 84
Jones, C. B., 191
Jones, D. M., 278
Jones, E. R., 458
Jones, H. A., 478
Jones, J. K. N., 72, 325
Jones, K. K., 414, 415
Jones, R. A., 84, 85
Jong, S. de, 309
Jonxis, J. H. P., 429
Jordan-Lloyd, D., 109, 110
Josland, S. W., 368
Joslin, A. P., 241
Joslin, E. P., 152, 241
Jost, L., 515, 518, 526
Jowett, M., 18, 158, 175
Joyet-Lavergne, P., 14
Jucker, F., 408
Judovitz, M., 156
Jukes, T. H., 314, 315, 316, 318, 319
Jung, A., 312, 313

K

Kabat, E. A., 83
Kägi, H., 266
Kagabe, K., 493
Kahlenberg, O. J., 366, 369
Kalcker, H., 389
Kamlet, J., 118, 152
Kamm, O., 272, 278, 279

Kaneta, B., 246
Kanewskaja, S. J., 103
Kapeller-Adler, R., 118
Kaplan, A., 153, 156, 177, 403, 404
Kappelmeier, C. P. A., 81
Karasima, T., 500
Karlberg, O., 118
Karrer, P., 6, 23, 61, 319, 325, 338, 437, 438, 440
Karrer, W., 312
Karshan, M., 243
Kasprzyk, K., 106
Kassell, B., 204
Katagiri, H., 8, 506
Katagiri, M., 432
Katz, S. A., 485
Katzman, P. A., 289, 290
Kaufmann, H. P., 80, 84, 85
Kaunitz, H., 409
Kaupp, O., 523
Kay, H. D., 125
Kayo, S., 493
Keeler, H. R., 232
Keenan, J. A., 315
Keilin, D., 7, 9, 12, 13, 190, 191, 428, 429, 431, 432
Keith, N. M., 243
Kellner, L., 110
Kelly, N. B., 283
Keltch, A. K., 17
Kemmerer, A. R., 165
Kemmerer, K. S., 356, 357
Kempner, W., 23
Kendal, L. P., 129, 131, 381, 382
Kendall, E. C., 253, 254, 256, 257, 260, 265
Kendall, F. E., 73, 496
Kendrick, A. B., 105
Kenner, J., 318
Kentmann, H., 424
Kenyon, A. T., 268, 275
Kepinov, L., 399, 400
Keresztesy, J. C., 312
Kerr, R. B., 152
Kerr, S. E., 150, 153
Kerridge, P. T., 234, 238
Kestner, O., 290
Keston, A. S., 173
Kesztler, F., 487
Kesztyüs, L., 171
Kettenmeyer, G., 148
Khinura, M., 487
Kidd, F., 326
Kidson, E. B., 368
Kiessling, O., 16
Kiessling, W., 129, 133
Kihara, G., 452
Kik, M. C., 370
Kilborn, L. G., 354
Killefer, D. H., 335
Kimm, R., 345
Kimura, H., 191
Kimura, J., 279
Kinderman, V., 289
Kindler, E., 213
King, C. G., 7, 16, 327, 328, 329, 410
King, E. J., 90, 125
King, H., 477
Kinnersley, H. W., 305, 311, 314, 315
Kinney, C. R., 100
Kinsman, G. M., 354, 371
Kirk, E., 205, 206, 221, 408
Kirk, P. L., 107
Kishi, S., 414
Kitagawa, M., 99, 195
Kitagawa, R., 168
Kitahara, K., 506
Kitasato, Z., 463, 465, 466
Kitchen, H., 63
Klages, F., 70
Kleiber, M., 366, 369
Klein, M., 271, 278, 280
Klein, W., 358
Kleinau, W., 438, 439
Kleinberg, W., 293
Kleiner, I. S., 327, 431
Kleinschmidt, H., 215, 225
Klemm, L., 425
Klemm, W., 425
Klemperer, F., 4
Klempner, E., 267
Klenk, E., 182
Kline, O. L., 315, 348
Kluyver, A. J., 503
Knight, B. C. J. G., 313, 316, 491, 492
Knight, E. C., 28
Knöpfle, L., 104
Knoop, F., 20, 21, 193
Knoop, H., 69
Knorr, H. V., 423
Knott, L., 152
Knutti, R. E., 198, 411
Kobayashi, S., 485
Koch, C., 243
Koch, F. C., 266, 268, 275
Koch, K., 520
Kochakian, C. D., 268
Kocholaty, W., 506
Kögl, F., 313, 314, 515, 516, 517, 520, 524, 525
Koehler, A. E., 240
Köhler, F., 28, 174
Köhler, L., 28, 174
Koehn, C. J., 315, 317, 319
Koehne, M., 243
Koenig, K., 69
Königsdörfer, H., 424
Kohler, G. O., 371
Kohlstaedt, K. G., 413
Kohn, H. I., 28, 201
Kolosovskiĭ N. A., 485
Kolthoff, J. M., 2
Komori, S., 92
Komppa, G., 453
Kon, S. K., 326, 340, 370, 371
Kondo, T., 176
Kopeloff, L. M., 503
Kopeloff, N., 503
Koppenhoefer, R. M., 167
Korányi, A., 157, 241
Korenchevsky, V., 266, 269, 270
Kornmann, P., 515
Korpi, K., 285, 293
Korr, I. M., 14
Koschara, W., 211, 440, 441, 442
Koser, S. A., 493
Koster, H., 178, 415
Kostermans, D. G. F. R., 517, 524
Kotake, Y., 104, 190, 197
Kotzschmar, A., 437, 441
Kovats, J., 508
Koyama, K., 87, 407
Koyama, R., 96
Kraemer, E. O., 115
Kraft, G., 135
Krahl, M. E., 17
Krantz, J. C., Jr., 413, 415
Krarup, N. B., 152
Krasnow, F., 243
Kraus, F., 2, 12, 427, 431
Krause, A., 11
Krause, M. E., 314, 315, 316
Kraut, H., 41, 114
Krebs, H. A., 20, 21, 26, 27, 157, 173, 189, 190, 191, 193, 195, 196, 201, 204, 241, 386, 387, 409, 505
Krebs, W., 436
Kretschmayer, R., 195
Krishman, B. G., 319, 340
Kriss, M., 368
Kritsman, M. G., 27, 189, 196, 387
Krohn, P. L., 281
Kruse, H. D., 366

Krusius, F. E., 308
Krzemieniewski, S., 508
Kubli, A., 312
Kubowitz, F., 7, 13, 29
Kuck, J. A., 3
Kühner, A., 331
Kuhn, R., 4, 28, 44, 103, 114, 133, 174, 318, 336, 423, 438, 440, 441, 450
Kuhn, W., 52
Kuizenga, M. H., 259
Kulikov, F. S., 485
Kun, H., 276
Kung, L.-C., 354
Kunitz, M., 37, 42
Kunz, K., 460
Kunze, R., 358
Kuré, K., 181
Kurzrok, R., 290
Kurzweil, R., 241
Kuthy, L., 169
Kutzelnigg, A., 103
Kuwashima, Y., 493
Kuwata, T., 94
Kydd, D. M., 241, 243

L

Laan, P. H. van der, 519, 520
LaBarre, J., 148
Lackman, D., 25
Lacquet, A., 245, 246
La Forge, F. B., 476, 477, 479, 480, 481, 482
Lahr, E. L., 288
Laibach, F., 515, 517, 521, 523
Laine, T., 104, 193, 508
Lajos, S., 177, 442
Laki, K., 19, 20, 45, 157, 386
Lalich, J., 151
Lambert, J., 505
Lambrecht, R., 498
Lamm, O., 65, 66
Lang, A., 167
Lang, K., 103
Langley, W. D., 212, 216
Langlykke, A. F., 29, 499, 500
Langmuir, I., 110
Langston, W. C., 319
Lansing, W. D., 115
Lapworth, A., 91
Laqueur, E., 259, 268
Larizza, P., 197
Larsen, P., 515
Larson, P. S., 154, 360
Lasch, F., 339
Laser, H., 24
Lashakoff, A., 107
Laszt, L., 156, 169, 178, 261, 262, 319
Laucius, J. F., 272
Laug, E. P., 233, 235, 238
Laurie, J. R., 18
Lawaetz, B., 182
Lawrence, R. D., 157
Lawson, A., 107
Lawson, E. J., 278
Lawson, W., 273
Leavenworth, C. S., 193, 206
Leblonde, C. P., 332, 410
Lecoq, R., 164, 367
Lederer, E., 338, 437
Lederer, L. G., 410
Lee, J. van der, 174
Lee, R. C., 155, 163, 176, 355, 356
Le Fanu, B., 523
Lehmann, B., 507
Lehmann, H., 26, 128, 134, 138, 382, 383
Lehnartz, E., 390
Lehrman, L., 83
Leitch, I., 359, 363
Leites, S., 175, 176, 405
Lek, H. A. A. van der, 523
Leloir, L. F., 22, 27, 29, 147
Lelu, P., 196, 223
Lemberg, R., 431, 432, 433, 434, 435, 436
Lenchêre, R. L. de, 272
Lendzian, H., 69
Lennerstrand, A., 23, 25, 129
Leonard, S. L., 271, 281
Leong, P. C., 309, 312
Leont'ev, H., 486
Lepkovsky, S., 308, 314, 315, 316, 318, 319
Leroux, L., 200
Lesne, E., 411
Lesure, A., 413
Levene, P. A., 7, 104
Levenstein, I., 288
Leverton, R. M., 362
Levine, H., 319
Levine, R., 154
Levine, S. Z., 215, 221, 225
Levine, W. T., 290
Levy, G., 495
Levy, J., 240
Levy, M., 103
Lew, W., 408
Lewis, H. B., 205
Lewis, J. M., 342
Lewis, L., 259, 292, 347
Lewis, L. A., 292
Lewis, R. C., 354
Lewis, R. M., 276
Li, H.-M., 408
Liang, T.-Y., 360
Libbrecht, W., 22
Libowitzky, H., 425
Lichtenstein, N., 109
Lichtman, A. L., 155, 180
Lieb, H., 211
Lieben, F., 195, 223
Liebknecht, W., 127
Lieck, H., 326
Light, R. F., 340
Lightbody, H. D., 478
Lilienfeld, A., 330, 331
Liljestrand, G., 19
Lin, C. Y., 2, 29
Lindenfeld, K., 427
Linderstrøm-Lang, K., 48
Lindqvist, T., 410, 438
Lineweaver, H., 37, 43
Linn, D. R., 347
Linneweh, F., 211, 216, 221
Linneweh, W., 211, 216, 221
Linstead, R. P., 422
Lintner, J., 460
Lipman, F., 504, 505
Lipmann, F., 5, 26, 27, 132, 156, 306, 307, 312, 391
Lissitzin, M. A., 115
Litynski, T., 126
Liu, S. H., 238, 240
Liu, M. Y., 69
Localio, S. A., 424
Lockwood, L. B., 503
Lockwood, W. H., 436
Loeb, L., 289
Loebel, R. O., 143
Löffler, W., 201, 202
Loeper, M., 413
Loeser, A., 410
Loevenhart, A. S., 240
Loewe, R., 438
Löwenberg, K., 450
Lohmann, K., 37, 47, 125, 126, 127, 128, 130, 132, 134, 135, 136, 156, 305, 306, 307, 378, 388, 390
Loiseleur, J., 233
London, E. S., 199, 409
Long, C. N. H., 112, 143, 146, 147, 179, 263, 281, 282, 287
Long, M. L., 242

Longenecker, H. E., 166
Longsworth, L. G., 232, 234, 235
Looney, J. M., 148, 239
Loop, W., 67
Lorber, G., 381
Lorenz, F., 28
Loring, H. S., 101, 112
Lovern, J. A., 77, 88, 166
Lu, G. D., 309
Luck, J. M., 408
Ludewig, S., 199, 222
Ludwig, E., 26
Ludwig, H., 412
Ludwig, W., 100
Lufkin, N. H., 151
Lugg, J. W. H., 106
Lukens, F. D. W., 143, 179, 263
Lun, F., 152
Lund, H., 326
Lund, J., 87
Lundegårdh, H., 15
Lundsgaard, C., 399
Lundsgaard, E., 171, 383, 384, 393, 402
Lundsteen, E., 238
Lung, K.-H., 61
Lwoff, A., 314, 434, 491
Lwoff, M., 314, 434, 491
Lyman, C. M., 14
Lyman, Y., 486
Lyons, M., 368
Lyons, W. R., 279, 287, 288
Lythgoe, R. J., 438, 439

M

McAllister, E. F., 261
McArthur, C. S., 344
McCance, R. A., 149, 157
McCartney, W., 476, 477
McClendon, J. F., 238
McClure, F. J., 363, 365
McClure, W. B., 365
McCollum, E. V., 312, 366
McConnell, K. P., 172
McCoy, R. H., 221, 356
McCullagh, D. R., 269, 284, 285
McCutcheon, A., 154, 360
MacDonald, J., 61
McEuen, C. S., 269, 271, 288
McGinty, D. A., 279
McGowan, G. K., 26, 307
McGrew, R. V., 278
McHargue, J. S., 487
Macheboeuf, M. A., 495
Machemer, H., 52, 53
McHenry, E. W., 155, 177, 407
Machlis, S., 24
McIndoo, N. E., 484
MacInnes, D. A., 232, 233, 234, 235
MacIntosh, J., 340
MacIntyre, M., 107
MacKay, E. M., 145, 151, 179, 180, 260, 263, 365, 404, 406
MacKay, L. L., 260
McKenzie, B. F., 253, 254, 256, 257
McKinley, J. B., 362
McKinney, R. S., 81, 83, 90, 94
MacLachlan, P. L., 407
MacLagan, N. F., 245
Maclean, D. L., 402
McLean, F. C., 237
Maclenathen, E., 330, 331
Macleod, J., 15
Macleod, M., 136
McMeekin, T. L., 108
McMichael, J., 412
McQuarrie, I., 146, 149, 259, 361
McQuillan, F. C., 458
Macrae, T. F., 316, 317, 318, 319
McShan, W. H., 286
Macwalter, R. J., 344, 345
Madden, R. J., 99, 317, 488
Madden, S. C., 198, 411
Maddock, S. J., 26
Mager, A., 111, 118
Magnus-Levy, A., 112
Magoffin, J. E., 6
Mahr, U. I., 27
Maier, I., 371
Main, R. J., 244
Mainzer, F., 237, 247
Maitra, M. K., 340
Majima, S., 190
Major, R. H., 115, 152
Majumdar, B. N., 338
Makepeace, A. W., 280
Malam, M., 153
Malek, I., 497
Malloy, H. T., 436
Malmberg, M., 47, 316, 317, 319, 440
Malmejac, J., 412
Mamoli, L., 29, 266
Man, E. B., 90
Mandel, E., 216, 217
Mangold, E., 358
Mangun, G. H., 213
Manly, R. S., 176, 177
Mann, F. C., 148, 176, 396, 406, 407, 414
Mann, P. J. G., 28, 404
Mann, T., 13, 431
Manville, I. A., 367
Marble, A., 241
Marcelet, H., 88, 95, 96
Mardashew, S., 104
Marenzi, A. D., 409
Margaria, R., 236
Marine, D., 290
Mark, H., 59, 65, 112
Markees, S., 155, 175
Marker, R. E., 272, 278
Markley, K. S., 94, 95
Markuze, Z., 369
Markwood, L. N., 487
Marmorston, J., 330, 331, 332
Marnay, A., 390, 396
Maroney, J. W., 354, 360, 364
Marples, E., 215, 221, 225
Marracino, R., 355
Marrian, G. F., 253, 257, 273, 274, 278, 289
Marschek, Z., 484
Marshall, F. H. A., 289
Marston, H. R., 357
Martin, A. W., 17
Martin, C. G., 318
Martin, D., 408
Martin, G. J., 345, 365
Martin, J., 171
Martin, J. T., 478
Martin, R. W., 156, 309
Martin, S. J., 146
Martius, C., 20, 21, 193
Martius, K., 386
Masamune, H., 118
Maschmann, E., 506
Masior, S., 139
Mason, C. S., 254
Mason, H. L., 253, 254, 256, 257
Mason, K. E., 347
Mason, M. F., 412
Massart, L., 22
Massengale, O. N., 341
Masuda, K., 8, 432
Mathews, J. A., 478
Matsuoka, Y., 402
Mattill, H. A., 345
Maurat, G., 222
Mawson, C. A., 26, 138
Mayer, A., 414
Mayer, E. W., 455, 456
Mayer, H., 216, 217
Mayer, N., 1

Maynard, L. A., 370
Mazza, F. P., 169, 175, 356, 409
Mead, T. H., 100
Means, J. H., 355
Medes, G., 205
Medlar, E. M., 365
Meek, W. J., 151
Meel, L. van, 180
Meeraus, W., 381
Meerwein, H., 440
Meier, E., 435, 436
Meiklejohn, A. P., 313
Meiklejohn, J., 15
Meinel, K., 85
Meisel, H., 497
Melampy, R. M., 347
Mellen, H. S., 149
Melnick, D., 364, 365, 370
Mendel, B., 24
Mendel, L. B., 363
Mendive, J. R., 118, 152
Menzel, A. E. O., 496
Merckel, C. G., 269, 270
Merritt, L., 370
Mertens, E., 423
Meschkowa, N. P., 107
Mészáros, G., 243
Metzger, W., 422
Metzincesco, M. D., 223
Metzner, P., 522
Meyer, C. E., 104
Meyer, H. S., 144
Meyer, K., 118, 496
Meyer, K. H., 59, 380
Meyer, R. K., 270, 277, 279, 286
Meyerhof, O., 16, 22, 23, 47, 126, 127, 129, 130, 131, 134, 135, 136, 200, 381, 383, 388, 392
Meyers, R. J., 110
Mezincesco, M. D., 361
Mezincesco, P., 357
Michaelis, L., 3, 4, 5, 10, 16, 39
Michaelis, M., 505
Micheel, F., 26
Michel, H. O., 9, 19
Michel, H. v., 429
Micheli, P. L., 408
Miduno, S., 103
Miescher, K., 266, 267, 273
Mikhelson, L. A., 79
Mikusch, J. D., 85
Milhorat, A. T., 216, 221
Miller, B. F., 212, 217, 506
Miller, C. D., 354
Miller, D. K., 364
Miller, E. J., 115
Miller, G. L., 101
Miller, J. I., 364, 370
Miller, L., 117
Miller, L. C., 275
Miller, R. F., 339
Millikan, G. A., 10, 395, 430
Minett, F. C., 371
Minnhaar, T. C., 413
Miraglia, P. R., 86
Mirsky, A. E., 110, 119, 379, 380, 428, 429, 439
Mirsky, I. A., 151, 155, 405
Miseta, O., 414
Mishkind, D., 327
Mitchell, H. H., 358, 362, 363, 365, 370, 371
Mitchell, J. S., 110
Miwa, T., 224
Miyama, R., 71
Mocquot, G., 371
Model, A., 201
Möbius, W., 220, 221
Möhle, W., 130
Mohr, H., 241
Mokrzhitzkaya, E. N., 487
Moll, T., 332
Molloy, E., 328
Molvig, H., 423
Mond, R., 396
Monier-Williams, G. W., 51
Moon, H. D., 264
Moore, E., 99, 378
Moore, T., 93, 164, 339
Moraczewski, W., 181
Moraguez-Gonzalez, V., 16
Morena, J., 428
Morgan, W. E., 430
Morgan, W. T. J., 73, 497
Morgulis, S., 103, 220, 221
Mori, P., 7
Mori, T., 7
Morra, G., 485
Morrell, J. A., 263, 264
Morrell, R. S., 81, 92
Morris, C. J. O. R., 336
Morris, N., 244, 343
Morris, S., 371
Morris, T. N., 332
Morrison, F. B., 370
Morrison, S., 415
Morse, M., 242
Morton, R. A., 337, 338
Moruzzi, G., 18
Mosinger, M., 399
Mosonyi, J., 410
Moss, A. R., 83
Mottram, E. N., 91
Mourot, G., 222
Moyer, C., 244
Mudd, S., 25, 116
Mühlbock, O., 274
Müller, A., 169, 422, 423, 437, 523
Müller, D., 28
Müller, E. F. W., 414
Müller, H., 212
Mueller, J. H., 114, 492, 497, 498
Müller, O. H., 2
Müller-Nef, H., 424
Mukherjee, R., 370
Mull, J. W., 243
Muller, C., 346
Muller, F., 235
Muller, J. H., 346
Munch, R., 429
Munro, H. N., 154, 360
Munro, J., 71
Muntwyler, E., 234, 243, 244
Murakami, S., 69
Muralt, A. v., 242
Murata, F., 171, 412
Murlin, J. R., 152, 176, 177
Murlin, W. R., 152, 176, 177
Murray, C. D., 232, 236, 237
Murray, S., 153, 156, 157, 175, 262, 403, 405
Musselman, L. K., 283
Mustafa, A., 498
Mutch, J. R., 339
Mutzenbecher, P. v., 100
Muus, J., 316
Myers, C. S., 254
Myers, V. C., 212, 213, 234, 243
Myrbäck, K., 63

N

Nachmansohn, D., 390, 396
Nagao, M., 516
Nahum, L. H., 144
Nakagawa, I., 354
Nakamura, T., 26
Nakamura, Y., 165
Narkuziev, T., 487
Nasset, E. S., 176, 177
Nath, B. V., 488
Nath, M. C., 370
Natucci, G., 244

Naumann, H. N., 436
Nayer, P. P. de, 165
Neal, W. M., 367, 368
Neale, S. M., 55, 56
Neber, M., 193, 196, 408
Needham, D. M., 23, 128, 129, 134, 189, 241, 377, 382, 383, 384, 385, 386, 388, 389
Needham, J., 25, 26, 27, 134, 138
Negelein, E., 23, 37, 46, 112, 132, 433, 434
Neild, H. W., 246
Nelson, E. K., 95
Nelson, E. M., 342
Nelson, J. W., 285
Nelson, M. E., 502
Nelson, W. O., 269, 270, 271, 288
Nemecskay, T., 243
Nepveux, F., 413
Neuberg, J., 205
Neuberger, A., 108
Neufeld, A., 143
Neumann, A., 107
Neumann, F., 53
Neurath, H., 110, 119
Neuschul, P., 503
Neuweiler, W., 440
Newburger, R., 153
Newburgh, L. H., 365
Newman, E. V., 394
Newman, M. S., 82
Ni, T. G., 220
Nice, M., 243
Nicolaysen, R., 343, 411
Nicolewa, N. V., 213
Nielsen, N., 524
Nielsen, N. A., 399
Niemann, C., 110, 111, 116, 117, 428
Niemann, R., 70
Niemer, H., 391
Nilson, H. W., 260
Nilsson, I., 107
Nilsson, R., 15, 131
Nishida, K., 461
Nishimura, K., 412
Nitzescu, I. I., 215, 219, 224, 408
Nixon, A., 152
Nolan, L. S., 119
Noller, C. R., 469
Nonnenbruch, W., 199, 408
Norkina, S. S., 487
Norman, M. F., 103
Norpoth, L., 196, 399
Norrie, M., 431, 433, 434
Norris, L. C., 368
Northrop, J. H., 37, 39, 40, 42, 117, 498
Novac, A., 485
Nowinski, W. W., 25, 27
Nuernbergk, E. L., 520, 526
Nyström, H., 22, 47

O

Oakwood, T. S., 272, 278
Oard, C., 243
Oberdisse, K., 191
O'Brien, H., 235, 236
O'Brien, J. R., 307, 311, 314, 315
Ochoa, S., 22, 47, 131, 381
Oda, M., 493
Odell, A. D., 273, 274, 278
Odinov, A. I., 405
Odinow, A. J., 175, 176
Oesting, R. B., 268
Ogura, Y., 8
Ohlig, W., 436
Ohlmeyer, P., 22, 47, 131, 381
Oi, T., 181
Okey, R., 405
Okinaka, S., 181
Okkels, H., 293
Okunuki, K., 7, 193
Olcott, H. S., 344, 345
Oleson, J. J., 317
Oliva, G., 414
Oliver, E., 72
Oliver, T., 213
Olson, F. R., 504
Onoe, T., 118
Onozaki, T., 168
Onstott, R. H., 315, 318, 319
Orcutt, F. S., 508
Orekhov, A., 487
Orent-Keiles, E., 366
Orinick, M. T., 485
Orla-Jensen, S., 492
Orskov, S. L., 399
Orten, J. M., 20, 21, 157
Osburn, O. L., 27, 499, 500
Osterberg, A. E., 214
Ostern, P., 128, 130, 382
Oszacki, A., 241
Otis, L., 371
Otsuki, T., 71
Otte, K., 526
Otte, N. C., 492
Oudet, P., 290
Outhouse, E. L., 139
Outhouse, J., 370, 371
Overbeek, J. van, 515, 516, 519, 520, 521

P

Paál, A., 520
Pacini, A. J., 347
Page, I. H., 170, 364
Pagel, W., 328
Paget, H., 84
Paic, M., 498
Palladin, A. V., 213, 219
Palmer, A., 275
Palmer, J. W., 118
Palmer, L. S., 221, 347
Palthe, P. M. Van W., 240
Pangborn, M. C., 103, 494
Pappenheimer, A. M., Jr., 114, 497, 498
Parker, R. F., 14
Parkes, A. S., 266, 267, 271, 273, 278, 292
Parkins, W. M., 146, 261, 263, 264
Parnas, J. K., 20, 128, 129, 130, 200, 241, 382, 384, 386
Parry, T. W., 85
Parschin, A. N., 377
Parsons, L. G., 331
Passmore, R., 328
Patton, A. R., 221, 368
Paul, H., 86, 166
Pauling, L., 11, 110, 111, 425, 426, 429
Pearson, O. H., 437
Pearson, P. B., 198, 370
Peat, S., 63
Pecsenik, O., 276
Peden, O. D., 343
Pedersen, K. O., 115, 435
Peitzner, H., 69
Peldán, H., 500
Pelikan, K. A., 85
Pencharz, R. I., 285, 293
Penfold, A. R., 458
Pennacchietti, M., 245
Pennetti, G., 412
Penquite, R., 368
Penrose, L., 27, 203
Percival, E. G. V., 61, 64, 65, 66, 68, 71, 325, 326
Pereira, J., 156, 308
Pereira-Forjaz, A., 505
Peretti, G., 165, 169, 407
Perla, D., 225, 330, 331, 332
Perrier, C., 171
Persons, E. L., 348
Pescarmona, M., 414
Peters, K., 242

Peters, J. P., 231, 235, 239, 241, 243, 244, 245, 246
Peters, R. A., 26, 132, 156, 305, 306, 307, 308, 311, 312, 313, 315
Peterson, D. H., 268, 275
Peterson, F. C., 71
Peterson, W. H., 29, 492, 493, 499, 500, 504, 507
Petrunkin, A. M., 246
Petrunkin, M. L., 246
Pett, L. B., 125
Pettigrew, J. B., 105
Pettit, H., 25
Pétursson, M., 127
Pfau, A. S., 453, 454, 458, 459
Pfeiffer, C. A., 285, 287, 290
Pfeiffer, P., 104
Pfiffner, J. J., 254, 259
Pfyl, B., 485
Philipp, H., 112
Phillippi, G. T., 110
Phillips, R. A., 150
Phillips, W. A., 280
Philpot, F. J., 28, 201, 202, 409
Picken, L. E. R., 380
Pierce, H. B., 152
Pieth, P., 469
Pilcher, J. F., 213, 223
Pillai, R. K., 23, 129, 382, 383, 384, 386
Pincus, G., 274, 279
Pincussen, L., 125
Pinösch, H., 192
Pirch, E., 506
Piret, E. L., 492, 507
Pirosky, I., 434, 491
Pistor, H. J., 19
Pi Suñer, A., 309
Pizzolato, P., 211
Platt, A. P., 177, 403
Platt, B. S., 238, 309
Plattner, P. A., 453, 454, 458, 459
Plimmer, R. H. A., 139
Pock-Steen, P. H., 182
Pohl, R., 516
Polak, J. J., 267, 306
Polanyi, M., 53
Pollok, H., 102
Pomerat, C. M., 15
Poncher, H. G., 215, 224, 225
Ponder, E., 15
Poo, L. J., 408
Popov, I. D., 370
Popper, H., 216, 217
Posselt, G., 166
Posternak, T., 139
Potop, J., 139
Potter, V. R., 21
Power, M. H., 195, 215, 220, 221, 222, 243
Pratt, J. P., 279
Prebluda, H. J., 312
Preisler, P. W., 2
Preiss, W., 486
Prelog, V., 467
Present, C. H., 167, 405
Presnell, A. K., 19
Prest, M. R., 277
Price, J. W., 234, 236
Price, W. A., 243
Prickett, C. O., 366, 367
Pritchard, H., 338
Pritchard, R. R., 457
Prjanischnikow, D., 194
Pruckner, F., 423
Przylecki, S. J., 106, 118, 200
Pucher, G. W., 106, 193, 194, 206
Pugh, C. E. M., 28, 201, 202
Pugsley, L. I., 223, 224
Pulver, R., 449
Puntambekar, S. V., 82
Pyke, M. A., 312
Pyle, J. J., 26

Q

Quaglia, F., 414
Quagliariello, G., 354
Quastel, J. H., 18, 27, 28, 158, 175, 201, 202, 328, 404
Questel, D. D., 487
Quibell, T. H., 440

R

Raalte, M. H. van, 516
Rabinowicz, M., 332
Rabinowitch, E., 14
Rabinowitch, I. M., 164, 170
Radvin, S., 184
Rafalowska, H., 118
Rainey, R. C., 104
Raistrick, H., 70, 71
Rakieten, N., 246
Rakshit, P. C., 14
Ralli, E. P., 167, 405
Ramage, G. R., 455, 456, 457
Ramshorn, K., 517
Rand, C., 438
Ransohoff, J., 151
Ransom, R. M., 276
Rao, B. S., 457
Rapoport, M., 366
Rapoport, S., 126
Rappaport, F., 166
Rappolt, L., 326, 331
Rapport, D., 18
Rashba, H., 219
Ratner, S., 103
Ratsimamanga, R., 332, 410
Rau, S., 314
Rauchenberg, M., 198
Ravdin, I. S., 150, 414, 415
Ray, S. N., 330
Rayman, M. M., 500
Read, J., 451, 452
Reader, V. B., 313, 314, 315
Reale, L., 165, 407
Rebay, A. v., 422
Reber, R. K., 3
Reboul, J., 283, 284
Reed, C. I., 225
Reeves, R. E., 95, 166, 494, 495
Reich, W. S., 64
Reichel, M., 26
Reichert, F. L., 179, 401, 406
Reichstein, T., 253, 254, 256, 257, 449
Reid, C., 144, 400
Reifgerst, K., 358
Reihlen, H., 104
Reinartz, F., 453
Reindel, W., 29, 193, 201
Reinhold, J. G., 415
Reis, J., 128
Reiser, R., 169
Reiss, E., 515, 518
Reiss, M., 179
Rekers, P. E., 198, 411
Remesov, I., 272
Remington, R. E., 319
Remy, E., 211
Rewald, B., 89, 90
Reynolds, H., 501, 502
Reynolds, R. J. W., 325, 326
Reynolds, S. R. M., 280
Rhoads, C. P., 364
Rice, H. A., 241
Richardson, C. H., 487
Richardson, G. M., 492, 494

Richardson, H. B., 143, 144, 153, 215
Richardson, L. R., 320
Richardson, W. A., 62, 64
Richter, D., 17, 28, 201, 202, 203, 442
Richter, G., 139
Ricketts, A. T., 17
Ricketts, H. T., 118
Riddle, O., 288
Ridout, J. H., 402
Riegel, C., 184, 414, 415
Riemenschneider, R. W., 86
Riesmeyer, A. H., 486
Riesser, O., 222, 377
Rigg, J. G., 167
Riker, A. J., 504, 507
Rimington, C., 423, 442
Riml, O., 265
Ripert, J., 478, 482
Rippel, A., 507
Ritcher, P. O., 487
Rittenberg, D., 172, 173, 178, 184
Roark, R. C., 477, 484
Robbins, W. J., 314, 525
Roberts, E. G., 95
Roberts, L. J., 362
Robertson, A., 473, 474, 475, 476, 477
Robertson, E. C., 368
Robertson, J. M., 422
Robinson, A., 366
Robinson, H. W., 232, 234, 236
Robinson, R., 112, 458
Robison, R., 125, 128, 136
Robscheit-Robbins, F. S., 190, 198, 360, 370, 408, 411
Robson, J. M., 270, 271, 273, 280, 281
Robson, W., 99, 100
Roche, A., 437
Roche, J., 115, 118, 427, 428, 430, 432, 433, 437
Rock, J., 283
Rodiguez-Olleros, A., 412
Roe, E. M. F., 258
Roe, E. T., 503
Roe, J. H., 243
Rödland, A., 224
Roehm, G. H., 370
Roersch, C., 243, 244
Rohdewald, M., 133
Roller, D., 339
Roman, W., 125
Roncato, A., 165
Root, H. F., 241
Rosanova, V., 338
Roscoe, M. H., 314
Rose, A. R., 149
Rose, C. S., 244
Rose, H. J., 184, 414, 415
Rose, W. C., 99, 104, 221, 222, 356, 357, 364
Rosebury, T., 243
Rosen, S. H., 290
Rosenberg, D. H., 411
Rosenbohm, A., 197
Rosenfeld, B., 493
Rosenfeld, L. O., 134
Rosenheim, A. H., 117
Rosenthal, L., 118, 152
Rosenthal, O., 21, 176
Ross, S., 110
Ross, W. F., 101, 102
Rossenbeck, H., 243
Rossi, G., 168
Rothemund, P., 414, 421
Rothschild, F., 125
Rothstein, M., 39
Rotten, H., 343
Rouenhoff, A., 184
Roughton, F. J. W., 236
Rowlands, I. W., 290, 292, 346
Rubenstein, B. B., 283
Rubin, M. I., 366
Rubin, S. H., 167, 405
Rudy, H., 133, 440
Ruehle, A. E., 310
Ruffin, J. M., 319
Rundgrist, 331
Runnström, A., 24, 25
Runnström, J., 24, 25, 129
Rupe, H., 459, 460
Rusby, G. L., 473, 476, 477
Rusch, H. P., 271
Russell, J., 107
Russell, J. A., 144, 145, 146
Russel-Wels, B., 139
Rusznyák, I., 332
Rusznyak, S., 442
Ruzicka, L., 266, 267, 278, 449, 455, 456, 458, 460, 462, 463, 464, 465, 467, 468, 469, 479
Rydin, H., 308
Rydon, H. N., 455
Rytikov, M. G., 485
Rzeppa, H. W., 440

S

Sacks, J., 393, 394
Sacks, W. C., 393, 394
Sager, V., 271
Sahyun, M., 152
Saito, K., 244
Sakamoto, T., 212
Sallet, J., 414
Salmon, W. D., 177, 366, 367
Salvanet, R., 165
Salvesen, H. A., 244
Samec, M., 64, 65
Sampson, W. L., 312
Samuels, L. T., 145, 146, 147, 156, 262, 263, 401
Sanberg, M., 225
Sando, C. E., 94
Sannie, C., 244
Sansum, W. D., 152, 242
Sarguine, K. D., 487
Saric, R., 148
Sárkány, E., 15
Sarver, L. A., 2
Sarzana, G., 171
Sas, L., 199
Saslow, G., 18, 392
Sato, T., 8
Sato, Y., 184
Saunders, F., 493
Saurwein, E., 244
Savchenko, E. N., 487
Scaffidi, V., 218
Schachter, B., 274
Schaefer, V. J., 110
Schäfer, W., 523
Schaefers, O., 453
Schäffner, A., 129
Schales, O., 8, 432, 435
Schellenberg, H., 463, 464, 469
Schenck, F., 341
Schenk, M., 413
Scherp, H. W., 73
Scheunert, A., 312, 314, 328, 358
Schieblich, M., 312, 328
Schifflers, L., 246
Schiltz, L. R., 100
Schimmelpfeng, F. W., 196
Schlayer, C., 24
Schlenk, F., 22, 47, 130, 132, 316
Schlenker, G., 526
Schlossmann, H., 28, 201, 202
Schlubach, H. H., 67, 69
Schmid, L., 61
Schmidt, A., 42
Schmidt, C. L. A., 108, 415
Schmidt, H., 451
Schmidt, L. H., 413

Schmidt-Thomé, J., 266, 278
Schmitt, O., 485
Schmitz, H., 516
Schmulovitz, M. J., 274
Schneider, F., 104
Schneider, G. G., 73
Schneikert, O., 242
Schnellen, C., 503
Schnitzspahn, L., 454
Schöberl, A., 26
Schoen, L., 157
Schoen, M., 502
Schoenberg, A., 273
Schönberger, S., 427
Schoenheimer, R., 172, 173, 178, 184, 341
Schöpf, C., 441
Scholz, C., 266, 273
Schooley, J. P., 288
Schoorl, N., 347
Schopfer, W. H., 312, 313
Schorner, E., 115
Schorr, E., 16
Schott, H. F., 145, 146, 147, 263, 401
Schrader, G. A., 366, 367
Schreus, H. T., 424, 435
Schreyegg, H., 82
Schroeder, E. F., 103
Schubert, F., 73
Schubert, M. P., 3, 4
Schuler, W., 29, 193, 201
Schulhof, K., 290
Schultz, F. W., 242
Schultz, M. P., 331
Schultz, W., 16, 134
Schultze, E., 328
Schultze, M. O., 16, 328, 410
Schultzer, P., 259, 330, 331
Schulz, W., 129, 381, 383
Schulze, E., 402
Schuster, P., 37, 47, 127, 129, 130, 132, 134, 136, 138, 305, 306, 307, 378, 381, 383
Schwabe, E. L., 264
Schwabe, K., 235
Schwarzenbach, G., 4, 6, 23
Schwenk, E., 272
Scott, D. A., 152
Scoz, G., 16, 408
Seal, S. C., 497
Seastone, C. V., 40
Sebrell, W. H., 315, 318, 319
Seeger, W. H., 360
Seelig, S. S., 237, 238, 247
Seemann, C. v., 433, 435
Segesser, A. v., 103, 196, 434
Seitz, G., 423
Selfridge, G., 309
Selvaggi, G., 241
Selye, H., 143, 265, 269, 271, 280, 287, 288, 289
Selzer, L., 409
Semmler, F. W., 455, 456
Sendroy, J., Jr., 232, 233, 234, 235, 236, 237, 238, 239, 240, 247, 331
Serini, A., 273
Severinghaus, A. E., 346
Severson, G. M., 500
Sevringhaus, E. L., 242
Shaffer, P. A., 5
Shapiro, A., 178, 415
Shapiro, B. G., 224
Shapiro, H., 15, 16
Shapiro, H. A., 280
Shaw, J. R., 393
Sheard, N. M., 346
Shedlovsky, T., 233, 235, 239
Sheldon, G., 371
Shelesnyak, M. C., 282
Sherberg, R. O., 414
Sherman, C. C., 307
Sherman, H. C., 307, 355
Sherman, M. S., 95
Sherrard, E. C., 504
Sherrill, J. W., 151
Shibata, K., 116
Shigemi, H., 410
Shindo, T., 309
Shinwara, G. Y., 92
Shire, J., 224
Shlaer, S., 439
Shmuk, A., 487
Shock, N. W., 237, 238, 239, 240, 243
Shohl, A. T., 244
Shoji, R., 244
Shore, A., 106
Shorland, F. B., 167, 407
Shorr, E., 143, 144, 153, 215
Shrader, S. A., 469
Shrivastava, D. L., 497
Sidwell, A. E., Jr., 10, 427, 429
Siedel, W., 435, 436, 442
Siedler, V., 500
Sifferd, R. H., 198
Sigal, A., 328, 329
Sigalova, R. R., 213
Signaigo, F. K., 100
Silberman, D. E., 103
Silvette, H., 146, 149, 261
Simmonds, B. G., 24
Simmonet, H., 371
Simola, P. E., 306, 308
Simon, A. F. J., 460
Simon, E., 500
Simonovits, T., 428
Simonsen, J. L., 455, 456, 457, 458
Simpkins, G. W., 338
Simpson, M. E., 285, 293
Sinclair, H. M., 313
Sinclair, R. G., 172
Singer, E., 344, 345, 346
Siwe, S. A., 125
Sjolander, N. O., 499
Sjollema, B., 316
Sjostrom, P. M., 412
Skill, D. I., 274
Skoog, F., 516, 517, 523
Small, J. M. D., 343
Smelser, G. K., 346
Smelt, C., 78
Smit, W. C., 81
Smith, A. H., 20, 21, 157, 367, 368
Smith, C. M., 478
Smith, C. R., 487
Smith, D. J., 319
Smith, D. T., 348
Smith, F., 325, 326
Smith, J., 370, 371
Smith, J. A. B., 85, 171, 176, 177, 403, 404
Smith, L. E., 476, 477
Smith, M. C., 370, 371
Smith, P. E., 282, 283, 285, 289, 290
Smith, S., 104
Smorodinzew, I. A., 213
Smuts, D. B., 358
Smyth, E. M., 118, 496
Smythe, C. V., 4, 10, 14, 16, 28, 135, 136
Snapper, J., 205
Snell, E. E., 492, 493
Snider, R. H., 17
Snog-Kjaer, A., 492
Snow, R., 523
Snyder, C. D., 412
Snyder, F. H., 191
Sobotka, H., 153, 412
Søding, H., 514, 517, 518
Soffer, L. J., 153
Solmssen, U., 6
Solomon, C. I., 268
Soltys, A., 461
Somerville, J. C., 71

Somogyi, M., 148
Sorensen, M., 118
Sorg-Matter, H., 358
Sorkin, M., 37, 58
Soskin, H., 148
Soskin, S., 154, 275, 276, 396
Späth, E., 460, 487
Speakman, J. B., 114
Spencer, H. C., 220, 221
Sperber, E., 24, 25
Sperry, W. M., 184
Spiegel-Adolf, M., 90
Spielman, M. A., 279
Spies, J. R., 484
Spies, T. D., 320
Spiga-Clerici, A., 354
Sponsler, O. L., 53
Spring, F. S., 437, 468, 469
Sreenivasaya, M., 29
Stacey, M., 70, 71
Stadie, W. C., 234, 235, 236
Staemmler, M., 485
Stahly, G. L., 502
Stainsby, W. J., 77, 94
Stakheyewa-Kaverznewa, C., 114
Stange, O., 341
Stanley, W. M., 112, 113, 116
Stannard, J. N., 15
Stare, F. J., 157
Stark, C. N., 497
Starkenstein, E., 183
Staudinger, H., 54, 58, 62, 67, 479
Stearns, G., 225, 362
Steenbock, H., 165
Stefanelli, A., 19
Steger, A., 78
Steiger, M., 254, 257
Stein, R., 438
Steinhardt, J., 39, 40, 429
Steinhaus, A. H., 237, 241
Steinruck, K., 273
Steir, T. B., 15
Stekol, J. A., 412
Stelzer, S., 211
Stephens, D. J., 332, 424
Stephenson, M., 194, 505, 508
Stern, A., 423, 436
Stern, K. G., 11, 12, 25, 132, 152, 156, 305, 431
Sternfeld, L., 493
Steuber, M., 358
Stevenson, M. M., 343
Stevenson, S. G., 166
Stewart, C. P., 18, 191, 329, 392
Stewart, H. C., 169
Stewart, H. L., 415
Stickland, L. H., 129, 131, 194, 381, 382, 507
Stiebeling, H. K., 339
Stinger, D., 362
Stitt, F., 111, 426
Stocker, H., 440
Stodola, F. H., 166, 495
Stöhr, R., 401
Stokinger, H. E., 290
Stokstad, E. L. R., 348
Stolk, D. van, 272
Stone, R. W., 499, 500, 501
Stoner, G. G., 92
Stotz, E., 7, 16, 21, 327, 410
Stotz, H., 358
Stoyanoff, V. A., 184
Strack, E., 149
Strain, W. H., 424
Stransky, E., 200
Straub, F. B., 19, 20, 157, 385
Strauber, S., 179
Strauss, E., 115, 428
Strauss, M. B., 401
Strieck, F., 359
Ströbele, R., 4, 318, 440
Strong, F. M., 317, 488, 492, 493
Struck, H. C., 215, 225
Stubbs, J. J., 503
Stueck, G., 106
Subbarow, Y., 125
Subramaniam, T. S., 477
Suden, C. T., 265
Süllmann, H., 438
Sullivan, B., 80
Sullivan, M. X., 212, 219
Sulman, F., 289, 290, 293
Sumner, J. B., 7, 37, 48, 112, 119, 430, 432
Sundermann, F. W., 218, 226
Suolahti, O., 506
Surmatis, J. D., 107
Suzuki, Y., 409
Svedberg, T., 115, 428, 430, 437
Svirbely, J. L., 410
Swadesh, S., 151
Swaminathan, M., 370
Sweet, J. E., 144, 155
Swingle, W. W., 146, 259, 261, 263, 264
Sydenstricker, V. P., 319
Sykes, J. B., 292
Synephias, S., 164
Szankowski, W., 20, 386
Szanto, G., 410
Szécsényi-Nagy, E., 438
Szent-Györgyi, A., 19, 20, 157, 241, 326, 332, 363, 385, 386, 387, 442
Szittay, J., 411
Szörényi, E., 169

T

Tadokoro, T., 357
Täufel, K., 82
Taha, A. M., 319
Tainter, E. G., 17
Tait, H., 90
Takagi, 449
Takani, A., 99
Takase, S., 116
Takayama, Y., 103
Takeda, K., 70
Takei, S., 476
Talbot, F. B., 354
Talbot, N. B., 358
Talbott, J. H., 242
Tamiya, H., 8
Tamura, K., 452
Tang, P. S., 2, 15, 29
Tankó, B., 136
Tansley, K., 439
Tanturi, C. A., 414
Tapadinhas, J., 505
Tarnopolskaya, M. E., 240
Tattersfield, F., 478, 483
Tatum, E. L., 492, 493
Tauber, H., 132, 305, 327, 431
Tayenthal, W., 194, 508
Taylor, A. C., 233
Taylor, A. R., 261, 263, 264
Taylor, F. H. L., 309, 360
Taylor, N. B., 292
Taylor, T. W. J., 108, 110
Tazawa, V. Y., 42
Tazawa, Y., 116
Tendick, F. H., 272
Teorell, T., 125
Terroine, E. F., 199, 222, 223, 357, 358, 360
Terszakoweć, I., 130
Teunissen, P. H., 182
Tew, W. P., 347
Thaler, H., 82
Thallmayer, H., 29

Thannhauser, S. J., 26
Theorell, H., 4, 8, 37, 44, 45, 114, 133, 432, 440, 441
Thiele, W., 245
Thimann, K. V., 514, 515, 516, 517, 518, 523, 524, 525, 526
Thomann, G., 458
Thomas, B. H., 341
Thomas, J. E., 486
Thomas, J. W., 319
Thomas, K., 211
Thompson, H. W., 338
Thompson, K. W., 286, 289, 290, 292
Thompson, R. H., 145
Thompson, R. R., 37, 43
Thompson, W. H., 149
Thoms, H., 82
Thomsen, A., 220, 221
Thomson, D. L., 287, 289
Thorn, G. W., 259, 261, 264
Thorne, D. W., 493
Thunberg, T., 29
Timmis, G. M., 104
Tipson, R. S., 68
Tipson, S., 130
Tischer, A. O., 335
Tisdall, F. F., 342
Tiselius, A., 199
Tobin, C. F., 288
Toby, C. G., 292
Toby, G., 259, 292, 401
Todd, A. R., 311, 312, 313, 343, 345
Todrick, A., 26, 380
Tönnis, B., 313
Tolstoi, E., 152
Tomboulian, R. L., 152
Tomita, M., 200
Tomiyama, T., 108
Tosatti, M. P., 244
Toscani, V., 221
Tóth, G., 51
Town, B. W., 105, 106, 107
Townend, F., 114
Toyama, T., 87
Toyama, Y., 91, 95
Trace, J., 355
Traina Rao, G., 183
Trautmann, A., 243
Treadwell, C. R., 404
Treibs, A., 425, 442
Treibs, W., 457
Tria, E., 114
Triem, G., 25, 103, 196
Trikojus, V. M., 410
Tristram, G. R., 183, 403
Tropp, C., 2, 182
Truhaut, R., 244
Truszkowski, R., 260
Tsai, C., 153, 400
Tscherning, K., 266
Tschesche, R., 367, 442
Tschopp, E., 266, 267, 273
Tschopp, W., 326
Tsuchiya, T., 87, 91
Tsujimoto, M., 88
Tsujioka, S., 414
Tsushima, K., 410
Tucker, H. F., 177, 357, 403
Tufts, E. V., 366
Turfitt, G. E., 498
Turner, C. W., 287, 288
Turner, N., 487
Turner, W. J., 424
Turpeinen, O., 361
Tuzson, P., 437, 438
Tveraaen, I., 87
Tychowski, A., 139
Tyler, A., 15, 17
Tyler, D. B., 403
Tyndale, H. H., 283
Tyson, T. L., 42

U

Uchimura, Y., 1
Ucko, H., 362
Ueno, S., 87, 92, 96
Uhl, F. A., 125
Umschweif, B., 130, 382
Unangst, R. B., 486
Underhill, F. P., 348
Underkofler, L. A., 500, 503
Underwood, E. J., 362, 367
Uoda, H., 461
Urban, F., 8
Ustvedt, H. J., 240
Usui, R., 224
Utkin, L. M., 503
Utzinger, G. E., 23

V

Valette, G., 165
Valla, S., 357
Valley, G., 368
Van den Heuvel, F. A., 90
van Dyke, H. B., 276, 282, 286
Van Loon, J., 78, 81
Van Natta, F. J., 56
Van Prohaska, J., 180, 404
Van Slyke, D. D., 105, 217, 231, 232, 235, 236, 237, 238, 239, 240, 243, 244, 245, 246, 247
Van Veen, A. G., 499
Varma, B. S., 82
Vars, H. M., 259
Vasiliu, C., 414, 485
Vavon, G., 451
Velculescu, A. J., 125
Venning, E. H., 274, 278, 279, 282
Vercellone, A., 29, 266
Verkade, P. E., 174
Vermooten, V., 340
Verzár, F., 156, 168, 169, 178, 181, 261, 262, 319
Vestin, R., 22, 47, 130, 131, 132, 305, 381
Vetter, H., 440
Vickers, P., 117, 118
Vickerstaff, T., 469
Vickery, H. B., 106, 119, 193, 194, 206
Victor, J., 18, 277
Vigliani, E. C., 425
Vignati, J., 198
Virtanen, A. I., 104, 193, 506, 508
Virtue, R. W., 413
Vischer, M. B., 215
Voegtlin, C., 206
Vogt-Moeller, P., 182, 347
Vonderahe, A. R., 147
Vorhaus, M. G., 308
Voronova, V. V., 245
Voss, H. E., 267
Voss, W., 467

W

Wachstein, M., 149, 166
Wade, L. J., 144
Wade, N. J., 289, 290
Wadsworth, A., 103, 497
Waelsch, H., 205
Waesberghe, H. P. J. M. van, 195
Wagner-Jauregg, T., 4, 127, 130, 166, 378
Wakefield, E. G., 243
Wakeham, G., 411
Wakeman, A. J., 193, 206, 363
Wald, G., 438, 439
Waldenström, J., 423, 435, 442
Waldmann, E., 460

Waldschmidt-Leitz, E., 101
Walker, E., 26, 380
Walker, J., 452
Walker, R. H., 493
Walker, T. K., 28
Wallen-Lawrence, Z., 286
Wallis, E. S., 278
Wallsch, H., 117
Walsch, E. L., 269
Walti, A., 37, 43
Wang, C. C., 226
Wang, E., 224
Warburg, E., 332
Warburg, O., 27, 37, 43, 44, 46, 47, 127, 130, 132, 133, 316, 381, 383, 434
Ward, A., 330
Ward, J. F., 337
Warner, R. C., 1, 325, 326
Warren, F. L., 258
Wasteneys, H., 39
Watanabe, S., 357
Waterman, L., 259
Waterman, R. E., 308, 310, 315
Waters, E. T., 149, 401
Watson, C. J., 424, 436
Watson, E. M., 344, 347
Watson, M. B., 370
Way, T., 244
Weare, J. H., 108
Weber, C. J., 211, 212, 219, 220
Webster, F. A., 394
Weech, A. A., 170, 364
Weese, H., 309
Weichselbaum, T. E., 148, 357
Weidle, H., 460
Weij, H. G. van der, 517
Weil, H., 200
Weil, L., 506
Weiland, W., 240
Weil-Malherbe, H., 26, 27, 190, 193, 307
Weinstein, G. L., 280
Weiser, J., 408
Weiss, G., 82
Weiss, J., 11, 14
Weiss, S., 309
Weizmann, C., 493, 500
Weld, C. B., 292
Weller, G., 412
Wells, P. A., 503
Wenderlein, H., 423
Wendt, C. F., 167
Went, F. W., 514, 515, 516, 518, 519, 523, 525, 526
Wenusch, A., 486
Wepler, W., 204
Werkman, C. H., 27, 492, 493, 499, 500, 501, 502
Werle, E., 192
Werner, H., 86, 104
Wertheimer, 399
Wertheimer, E., 308
Werthessen, N. T., 279
West, A. P., 80
West, C., 326
West, H. D., 99
West, R., 42
Westall, R. G., 106
Westenbrink, H. G. K., 306, 309, 312
Westerfield, W. W., 274, 275
Westphal, K., 311
Westphal, U., 278
Wettstein, A., 266, 267
Weygand, F., 440
Wheatley, A. H. M., 328
Wheeler, G., 274
Wheeler, G. A., 348
Whipple, D. V., 155
Whipple, G. H., 190, 198, 360, 370, 408, 411
White, A., 25, 112, 152, 190, 287, 357
White, F. R., 205, 370
White, J., 205
White, P., 241
White, P. R., 525
Whitman, B., 272
Whitney, W. B., 11
Widenbaner, F., 331
Wiedemann, A., 193
Wiederkehr, F., 460
Wiegand, M., 277
Wieland, H., 414, 437, 441, 467, 468
Wierzuchowski, M., 154
Wiesbader, H., 282
Wieschahn, G. A., 90
Wiese, R. E., 244
Wiesner, B. P., 346
Wiggers, H. C., 283
Wilbur, D. L., 149
Wilcoxon, F., 483
Wilder, R. M., 149
Wilder, V. M., 221
Wilgus, H. S., Jr., 368
Wilhelmi, A. E., 211, 214, 218, 220
Wilkie, J. B., 337
Wilkins, R. W., 309
Wilkinson, H., 338, 403, 405
Willard, M. L., 107, 485
Williams, H. H., 163
Williams, R. R., 308, 310, 311, 312, 315
Wills, L., 320
Willstaedt, H., 410, 438
Willstätter, R., 51, 133
Wilson, D. W., 99, 378
Wilson, E. B., 354
Wilson, G. S., 371
Wilson, H., 106, 108
Wilson, H. E. C., 309, 338
Wilson, L. T., 340
Wilson, N. A. B., 452
Wilson, P. W., 508
Wilson, R. H., 485
Wilson, S. D., 354
Wilson, W. R., 170
Wind, A. H., 455
Windaus, A., 272, 341
Wingfield, C. A., 24
Winkler, A., 427
Winnek, P. S., 108, 361
Winslow, P. M., 198
Winterstein, A., 450
Winterstein, H., 244
Wintersteiner, O., 254, 272
Wintrobe, M. M., 411
Wise, L. E., 71
Witschi, E., 290
Witt, E., 275
Wittle, E. L., 278
Wodstrup, I., 152
Wolf, H. J., 367, 442
Wolfe, J. M., 269, 270, 271, 273, 346
Wolff, H. G., 216
Wolff, K., 10
Wollstein, M., 364
Woloszyn, M., 1
Wolvekamp, H. P., 429
Womack, M., 356, 357
Wonder, D. H., 285
Wood, C., 308
Wood, H. G., 492, 493, 500, 501
Wood, M. L., 99
Woods, D. D., 190, 194, 507
Woodward, G. E., 103
Woodward, H., 215, 224, 225
Woodward, I., 422
Wooldridge, W. R., 505
Woolley, D. M., 488
Woolley, D. W., 317
Worcester, J., 354
Work, T. S., 343, 345
Working, E. B., 89

Wortis, J., 151
Wright, I. S., 330, 331
Wright, N. C., 103, 371
Wrinch, D. M., 41, 109, 110
Wu, S.-W., 360
Wu, H., 119, 237, 268
Wulff, H. J., 23, 37, 46, 112
Wurmbach, H., 125
Wurmser, R., 2
Wyckoff, R. W. G., 112, 113, 115, 116, 119
Wylie, H. B., 274
Wyman, J. Jr., 108, 119
Wyman, L. C., 265
Wynd, F. L., 15
Wyndham, R. A., 431, 432, 434, 435
Wynn, W., 154

Y

Yakushiji, E., 7, 13
Yamaguchi, S., 13
Yamasaki, I., 500
Yarnell, W. A., 278
Yeager, J. F., 485
Yerby, L. D., 275
Yerkes, R. M., 283
Yi, C.-L., 400
Yoder, L., 341
Yoe, J. H., 125
Yokela, E., 405
Yokoyama, H., 402
Yonese, C., 87
Yoshikawa, H., 8
Yoshimura, H., 233, 238, 244
Yoshimura, K., 212
Youmans, W. B., 151
Young, E. G., 118
Young, F. G., 144, 145, 292, 377
Young, G., 274
Young, L., 16
Young, W. C., 279
Yudkin, J., 134, 504, 505

Z

Zacherl, M. K., 211, 216, 217
Zahl, P. A., 274
Zajic, E., 460
Zanke, W., 453
Zappacosta, M., 219
Zarrow, M. X., 15
Zav'yalova, A. P., 246
Zechmeister, L., 51, 211, 437, 438, 442
Zeile, K., 430
Zeitschel, O., 451
Zentmire, Z., 339
Zentner, M., 61
Zerbey, M. E., 485
Ziegler, M. R., 146, 259
Zilinski, M. A., 134
Zilva, S. S., 326, 327, 328, 330, 331, 332
Zimmerman, H. M., 243
Zimmerman, P. W., 524
Zimmermann, J., 463
Zimmermann, W., 211, 268, 455
Zimmermann, W. A., 523
Zinzadze, C., 125
Zipf, K., 192
Zischler, H., 423
Zizine, P., 411
Zondek, B., 290, 293
Zorn, K., 190, 195, 196
Zscheile, F. P., Jr., 10, 427
Zucker, T. F., 146, 148, 263
Zuckerman, S., 270, 272, 276, 281, 282, 283
Zussmann, H., 439
Zverev, V. V., 414
Zwarenstein, H., 224, 280
Zwemer, R. L., 260

SUBJECT INDEX

A

Abortion, vitamin E in treatment of, 347
Absorption spectra
  of cytochrome-*a*, 432
  of hemoglobin, 427
  of porphyrins, 423
Acetaldehyde reductase, 112
  prosthetic group of, 45
  protein of, 46
Acetopyruvic acid, utilization of, 27
Acetylcholine esterase in muscle tissue, 396
Acid-base balance of blood
  in alcoholism, 240
  anesthesia and, 246
  in cancer, 240
  in diabetes, 241
  diet and, 242
  during exercise, 241
  experimental and pathological variations, 240
  gastric disorders and, 245
  normal variation, 239
  in pregnancy, 243
  in renal impairment, 243
  respiration and, 244
  in rickets, 244
Acid-base balance constants
  determination of, 235
  first and second dissociation constants of carbonic acid, 235
  graphic calculation of data, 237
  methods and apparatus, 238
  methods of pH measurement, 233
  microtechnique for, 238
  pK for human red blood cells, 236
  pK for human urine, 237
  pK in serum, 236
Acid-base balance of urine, 246
Acid-base metabolism, 231; *see also* Acid-base balance
Acidosis and alkalosis, 239
Adenosinediphosphoric acid, 126
Adenosinetriphosphate, in muscle, 378
Adenosinetriphosphoric acid, structure of, 126
Adenylic acid, 126
  phosphorylation of, 382
Adenylic acid system, role as phosphate acceptor, 127
Adenylpyrophosphate, *see* Adenosinetriphosphate
Adrenal cortex
  essential function of, 260
  fat metabolism and, 179
Adrenal cortex (*cont.*)
  hormones of, bioassay, 259
    chemical structure, 254
    carbohydrate utilization, 261
    corticosterone, 253, 256
    desoxycorticosterone, 257
    effect in hypoglycemia, 263
    effect on ketosis and fat deposition in the liver, 263
    effect on lactoflavin in livers of rats, 262
    effect on rate of glucose absorption and glycogen deposition in the liver, 262
    physiologically active compounds, 253
    physiology, 259
    plasma volume, 261
    pregnane-3,17,20-triol, 257
    regulation of potassium metabolism, 260
  role in carbohydrate metabolism, 143
Adrenal function, interpretation of, 265
Adrenal gland, role in carbohydrate metabolism, 146
Adrenaline
  effect on oxygen consumption, 17
  effect on utilization of glucose in muscle, 396
  oxidation of, 201
  oxidation to adrenochrome, 442
Adrenaline oxidase, 28
Adrenochrome, 18, 203
  from adrenaline, 442
Adrenosterone, 254
Agar-agar, 71
Alcohol, oxidation by muscle tissue, 393
Alcoholic polyneuritis, effect of vitamin B_1 in, 309
Alcoholism, acid-base balance in, 240
Aldolase, 137
Alkalosis and acidosis, 239
Alloocimene, from α-pinene, synthesis of, 450
Alopoecia, relation of flavin to, 319
Amines
  enzymatic oxidation of, 201
  formation from amino acids, 192
  oxidation of, 28
Amino acid metabolism, as liver-function tests, 407
Amino acids
  acetylamino acids, 191
  bacterial utilization, 507
  behavior of stereoisomerides, 189
  with branched chains, deamination of, 191

Amino acids (*cont.*)
coupled reactions, 194
deamination of, bacterial, 194
site of, 191
by tissues, 408
formation of amines from, 192
glycogenesis from, 192
glycogenesis in liver and, 400
of hemoglobin, 428
hippuric acid, synthesis of, 205
interaction with α-keto acids, 27
intermediary links between carbohydrates and, 193
intermolecular transfer of amino groups, 189
metabolism
of canaline, 195
of canavanine, 195
in cystinuria, 204
of glutamic acid, 195
of glycine, 195
of histidine, 196
of methylated amino acids, 190
in moulds, 195
of phenylalanine, 196
in phenylketonuria, 203
of tryptophane, 197
of tyrosine, 195
in tyrosinosis, 203
occurrence of *d*-series, 190
requirements in nutrition, 356
role of *d*-amino acid deaminase, 190
utilization of *d*-series and conversion into *l*-series, 190
Amino acids and peptides
adsorption on Lloyd's reagent and frankonite, 107
composition of copper aspartate and copper glutamate, 104
determination of amide nitrogen, 106
of amino nitrogen, 105
of arginine, 105
of carboxyl groups, 105
of 3,4-dihydroxyphenylalanine, 107
of glucosamine, 107
of glutamine, 106
of glycine, 106
of histidine, 107
of tryptophane, 106
of tyrosine, 106
diazomethane for methylation, 103
dielectric constants, 108
dissociation constants, 108
enzymic hydrolysis of synthetic peptides, 102
Hofmann degradation, 103
microscopic identification of, 107
optical configuration, 104
oxidation of amino acids, 103
potentiometric titration of, 107
Amino acids and peptides (*cont.*)
Raman spectra, 108
reaction with formaldehyde, 103
reactions, 102
separation of amino acids, 106
solubilities of, 108
synthesis of, 99
Aminoethylphosphoric acid, 139
α-Aminophenylacetic acid, configuration of, 104
Ammoresinol, 460
α-Amylodextrin, 63
Amylopectin, 64
Amylose, 64
α-Amyrin, 469
β-Amyrin, 463, 464, 468
Anabasine, 487
Anaërobic metabolism, mechanism of, 381
d,l-Anatabine, 487
Androgenic ketones, reduction of, 266
Anemia
due to iron and copper deficiencies in diet, 367
vitamin-B complex and, 320
Anesthesia, acid-base balance and, 246
Aneurin, *see* Vitamin B_1
Anhydrocysteinyl-*l*-cysteine, synthesis of, 101
Anterior hypophysis
gonadotropic hormones of, 284
lactogenic hormones of, 284
Anterior pituitary, role in carbohydrate metabolism, 143
Antihormones
anti-cortin serum, 292
anti-gonadotropic substance, 289
anti-thyroglobulin sera, 290
prolan anti-hormone, 293
site of production, 293
Anti-pellagra factor, 314
Apomyozymase, 382
Apotoxicarol, 474
Arachidonic acid, curative agent for fat-deficiency symptoms, 361
Arginine
estimation with arginase, 105
as precursor of creatine, 218
dl-Arginine, from kidney autolysate, 105
Argininephosphoric acid, 134
Artemisia ketone, structure of, 449
Ascorbic acid, *see* Vitamin C
Asparagosin, 69
Asphodelin, 69
Astacin, 438
γ-Atlantone, 458
Aucuba-mosaic virus, 112
Auxenolonic acid, 515
Auxentriolic acid, 515

Auxin group
artificial growth substances, 524
asymmetrical distribution of, 519
auxin A, 515
auxin B, 515
cell elongation, 517
development of lateral buds, 523
effect of gravity on distribution, 519
effect of light, 520
effect on reactivity of the cells, 521
formation of, 516
function of, in plants, 523
growth movements in orthotropic organs, 518
in plagiotropic organs, 523
β-indolyl-acetic acid, 524
physiological effects of, 517
quantitative methods, 514
root-forming substance, 523
stimulation of cambial growth, 523
transport and distribution of, 516
transverse displacement of, 520
Azaporphins, 421
synthesis of, 422
Azulenes
number of, 453
structure of, 453
synthesis of, 454

B

Bacteria
acetone–butyl alcohol fermentation, 493
amino acid requirements, 493
amino acid utilization, 507
butyric acid fermentations, 499
carbohydrate fermentations, 499
carbohydrates synthesized by, 496
chemistry of, 491
colon-aerogenes fermentations, 501
diphtheria bacillus, 492
fixation of nitrogen, 508
growth substances, 491
lactic acid, 492
lactic acid fermentation, 502
lipids synthesized by, 494
methane fermentation, 504
nitrogen metabolism, 507
nutrient requirements of, 491
oxidative fermentation, 503
pigments of, 498
propionic fermentation, 500
proteins synthesized by, 497
proteolytic enzymes, 506
respiration enzymes, 504
root-nodule, 493
synthetic constituents of the culture, 494
Bacteriophage, nucleoprotein with properties of, 498
Basal metabolism
of animals, 355
of children, 354
depression on maintenance at constant weight, 359
effect of obesity on, 355
measurements, units of reference, 355
reduction due to deficiency in energy intake, 364
Basseol, 468
Bence-Jones protein, 112
Betulol, 457
Bile
ascorbic acid in, 413
biliary fistula rickets, 415
chemical and physical properties of bile acids, 413
chlorophyll porphyrins in, 414
cobalt and molybdenum in, 413
composition of, 414
and gall stones, 415
determination of bile salts, 413
of cholic acid, 413
of desoxycholic acid, 413
effect of cystine or methionine on taurocholate formation, 413
of various substances on bile flow, 414
limiting factor in bile salt production, 413
new compounds from, 414
oxidation products of bile acids, 413
physiological chemistry of, 412, 413
pigments of, 434
role of liver in bile-salt formation and destruction, 414
solvent effect for cholesterol, 414
transportation of fat-soluble vitamins across intestinal wall, 415
Bile acids, chemical and physical properties of, 413
Bile pigments
chromatographic analysis of, 442
chromoproteins, 437
compound with albumin, 435
with bilirubin, 435
formation of, from blood pigments, 434
mechanism of formation, 423
mesobilinogen, 436
nomenclature of, 435
in normal human blood serum, 436
pentdyopent, 436
stercobilin, 436
stercobilinogen, 436
synthesis of, 435
urobilins and urobilinogens, 436
Bile salts
determination of, in bile, 413
effects of administration of, 413
oxidation products of, 413

Bilirubin
of blood serum, 435
in normal urine, 436
Biological oxidation and reduction, *see* Oxidation and reduction
Bios group, 525
Biotin
effect on growth of pea seedlings, 525
effect on root growth, 525
Bituminous products, porphyrins in, 424
Blacktongue, in dogs, 315, 317
Blood
change in pH on standing, 238
creatinine in, 216
effect of anti-coagulants and clotting on pH, 238
lipids of, 169
sugar of, 149
see also Acid-base balance
Bromine, indispensability in nutrition, 361
Butyric acid, fermentation of, 499

C

Calcium
dietary deficiencies of, 365
requirement in nutrition, 363
utilization of, 370
Calcium absorption, influence of fat absorption on, 165
Campherol, 452
Camphor, decomposition products of, in the animal organism, 452
Canalin, 99
Canavanin, 99
Cancer, acid-base balance in, 240
Carbhemoglobin, 236
determination of, 429
Carbohydrate
oxidation to glucosone, 28
synthesis from lactate, 389
from pyruvic acid, 26
Carbohydrate metabolism
alcohol and, 155
blood sugar, 149
central nervous system in, 147
chemical constitution of glycogen, 399
cocarboxylase and, 305
effect of anterior pituitary gland on, 144
of hypophysectomy or adrenalectomy on, 144
of vitamin-B deficiency, 155
effects of administration of fructose, 154
of administration of galactose, 154
of administration of glucose, 154
endocrine and neural regulation of, 143
Carbohydrate metabolism (*cont.*)
glycogen, 152
glycogenesis, 145
glycogenolysis, 146, 153
glycogen storage, 153
insulin compounds, 151
insulin in, 144, 149
liver function and, 399
mechanism of oxidation, 157
phosphorus compounds and, 128
role of riboflavin in, 156
yellow ferment, 156
Carbohydrate oxidations, mechanisms of 157
Carbohydrates
bacterial fermentation on, 499
chemistry of, 51
synthesized by bacteria, 496
Carbohydrates and glycosides, chemistry of
agar-agar, 71
asparagosin, 69
asphodelin, 69
cellulose, 51
galactoaraban, 71,
galactocarolose, 70
galactogen, 67
glycogen, 66
graminin, 69
gums, 72
hemicelluloses, 69
hydrocelluloses, 56, 57
immuno-polysaccharides, 73
inulin, 67
irisin, 69
levan, 68
mannan, 70
mannocarolose, 70
mucilages, 72
oxycelluloses, 58
β-pachyman, 70
sinistrin, 69
starch, 60
triticin, 69
varianose, 71
xylan, 72
Carbohydrate utilization, impairment following adrenalectomy, 261
Carbon monoxide hemoglobin, 426
Carbon monoxide myoglobin, 430
Carboxylase, 48
Carboxypeptidase
activation by trypsin and enterokinase, 43
crystallization of, 42
denaturation by heat or acid, 42
determination of, 43,
inactive form in fresh pancreas, 43
purification of, 43
Carboxypolypeptidase, 112

Carnosine
metabolism of, 197
in muscle, 213
d-Carnosine, synthesis of, 101
Carotene, absorption of, 338
Carotenoids
astacin, 438
chromatographic analysis of, 442
of human serum, 438
of liver and serum, 410
retinene, 438
rhodopsin, 438
of storage fat, 438
visual purple, 438
vitamin A, 439
vitamin A_2, 439
β-Caryophyllene, structure of, 455
Caryophyllenes, 454
Catalase, 37, 112, 427
action of inhibitors, 431
composition of, 11, 430
compound with monoethylhydrogen peroxide, 12
compounds with hydrogen peroxide, 431
crystalline, 48, 430
preparation, 7
Cataract, relation of flavin to, 319
Cellular metabolism, role of inter-molecular transfer of amino groups in, 189
Cellulose
average size of micelles, 59
constitution, 51
copper number of, 57
degradation by biological agents, 52
effect of acid treatment, 57
estimation of reducing group, 55
fibre structure, 52, 59
formula for, 55
hydrocelluloses, 56, 57
kinetics of hydrolysis, 52
methylation of, 53, 54
modified, degree of polymerisation of, 56
molecular size, 53
oxidation of, 53
oxycelluloses, action of oxidizing agents on, 58
viscosity measurements on, 58
tensile strength of, 56, 57
X-ray diagrams, 59
Central nervous system, in carbohydrate metabolism, 147
Cerin, 470
Cevitamic acid, *see* Vitamin C
Chaulmoogric acid, 92
Chloroflavin, 4
Chlorophyll, reversible oxidation by ferric chloride, 14
Chlorophyll porphyrins, in bile, 414
Cholesterol
activation to antirachitic substances, 341
in diet, effect on rat growth, 407
effect on liver fat, 402
inhibition of esterification by bile or bile salts, 184
metabolism, 183
production in body, 183
Cholic acid
absorption of by inflamed ducts, 413
determination of in bile, 413
effect of thryoxin on elimination of, 413
Choline
effect on liver lipids, 402
effect on respiratory rate of rat-liver slices, 404
Choline esterase, 48
Cholinphosphoric acid, 139
Chondroitin sulfuric acid, 118
Chromatographic analysis, 442
Chromenocoumarins, 476
Chymotrypsin, crystalline, 42
Citric acid
in carbohydrate oxidation, 157
in respiration of muscle tissue, 386
Clovene, 456
Cobalt
deficiencies in diet, 367
metabolism of, 368
in nutrition, 362
Cobra poison, 26
Cocarboxylase, structure of, 47, 132
Codehydrase I, 131
Codehydrase II, 132
Codehydrogenase I, 22
Codehydrogenase II, 22
Coenzyme of carboxylase, 37
Colon-aërogenes, fermentation by, 501
Copper
dietary deficiency, 367
in nutrition, 362
Coproporphyrinuria and pellagra, 320
Corpus luteum hormones
*epi-allo*pregnan-3-ol-20-one, 278
*epi*pregnan-3-ol-20-one, 278
pregnanediol glucuronide, 279
pregnanolone, synthesis from cholesterol, 277, 278
progesterone, from corpus luteum extracts, 278
detection of small amounts, 279
effect on hypophysectomized rabbits, 280
inhibition of ovulation by, 280
structure, specificity of, 278
suppression of oestrus cycle by, 280
rabbit-assay method for progestin, 279

Corticosterone, 253, 256
Cortin, effect in electrolyte metabolism, 259
Cozymase
  in fermentation, 22
  function, 131
  in glycolysis, 47
  growth of bacteria and, 491
  identity with coenzyme of acetaldehyde reductase, 47
  influence of alkali upon, 22
  in lactic acid formation, 47
  phosphorylation of, 132
  preparation of, 22
  structure of, 130
Creatine and creatinine
  adsorption on silicates, 211
  analysis, 211
  creatinephosphoric acid, 213
  creatine tolerance, 214
  creatinine of the blood, 216
  creatinuria, in children, 225
    and disturbances of sugar metabolism, 222
    and proteins, 222
  3,5-dinitrobenzoate for determination of creatinine, 212
  distribution of, 212
  effect of gonads and hypophysis, 224
  effect of thyroid, 223
  energy metabolism, 223
  enzymatic analytical method, 212
  enzymatic destruction of creatinine, 506
  glycine and creatinuria, 220
  heart, creatine content of, 213
  metabolism of, 211
  optimal conditions for conversion of creatine into creatinine, 212
  origin of creatine, 218
  origin of urinary creatinine, 217
  site of creatinine formation, 218
  as substitute for other phosphate carriers, 213
Creatinine, *see* Creatine and creatinine
Creatinuria, 215
Cubé, insecticidal activity of, 477
Cysteine, effect in Pasteur reaction, 24
Cystine
  dispensability in nutrition, 356
  effect on fat deposition in liver, 403
Cystinuria, 204
Cytochrome, synthesis of by microorganisms, 434
Cytochrome-*a*, 8
  absorption spectrum of, 432
  effect of copper and iron on production of, 434
  hematin of, 433
Cytochrome-a_3, 434
Cytochrome-*b*, 7
Cytochrome-*c*, 7, 428
  composition of, 432
  mode of attachment of protein, 8
  preparation of, 432
  reduction by hydrogen donators, 385
Cytoflav, 439

D

Deamination, bacterial, 194
Decarboxypeptides, synthesis of, 101
Dehydroandrosterone, reduction by fermenting yeast, 29
Dental caries, diet and, 243
Derris, insecticidal activity of, 477
Desoxycholic acid, determination of in bile, 413
Desoxycorticosterone, 257
Dextrins, 63
Diabetes
  acid-base balance in, 241
  effects of carbohydrate on fat and protein metabolism, 155
  origin of, 143
Dideuterioleucine, synthesis of, 100
Dideuteriovaline, synthesis of, 100
17-Dihydroequilenins, 272
Dihydroxyacetonephosphoric acid, 135
  reactions with acetaldehyde, 136
3,4-Dihydroxyphenylalanine, N-methyl derivative, synthesis of, 100
2,4-Dihydroxyphenylalanine, synthesis of, 100
Diosphenol, 452
Diphtheria bacillus, pigment of, 498
Diphtheria intoxication, ascorbic acid and, 328
Diphtheria toxin, 114
  production and nature of, 497
Dismutation of ketonic acids, 26
Disulfide groups, colorimetric determination of, 26
Diterpenes, 460

E

Echinocystic acid, 469
Egg white, 118
Endocrine regulation of carbohydrate metabolism, 143
Energy, utilization of, 369
Energy metabolism, creatine-creatinine metabolism and, 223
Enzymes, 37
  acetaldehyde reductase, 45
  bacterial, 504
  carboxypeptidase, 42
  catalase, 7, 37, 48
  chymotrypsin, 41
  cocarboxylase, 47
  coenzyme of carboxylase, 43
  cozymase, 47

Enzymes (*cont.*)
crystalline, purity of, 37
distribution in tissues, 48
estimation of, 48
ficin proteinase, 37, 43
fumaric acid hydrogenase, 21
hepatic, 409
hydrolytic, 39
oxidative, 7, 38, 43
papain, 37, 43
pepsin, 39
proteolytic, from bacteria, 506
respiration, 504
role in oxidation-reduction, 6, 43
trypsin, 41
trypsinogen, 38
yellow enzyme, 44
*Epi-allo*pregnan-3-ol-20-one, 278
Epinephrine, *see* Adrenaline
*Epi*pregnan-3-ol-20-one, 278
Ergosterol, absorption from digestive tract, 341
Ergotamine, antiketogenic effect of, 405
Erythrocruorins, 115
composition of, 430
Erythrodiol, 463, 464
Erythrogranulose, 63
Estrus, *see* Oestrus

F

Factor 1, 314
Factor 2, 314
Factor H, 320
Factor W, 316, 317
Factor Y, 314
Fat deficiency, physiological effects of, 365
Fat requirements, in the diet, 361
Fat-soluble vitamins, isolation by molecular distillation, 335; *see also* Vitamins A, D, E, and K
Fats
absorption of, 165, 172
adaptation to high fat diets, 164
biterminal β-oxidation of saturated dicarboxylic acids, 174
blood lipids, 169
cholesterol metabolism, 183
depot fats of fishes, 166
elaidic acid, 172
estimation of, 166
excretion of, 178
fatty liver, 176
of hibernating hedgehog, 167
homocholine and fat metabolism, 177
hormonal regulation of fat metabolism, 178
influence, on calcium absorption, 165
of production of gastric juice, 165
of the pancreas in blood lipids, 170
intermediary fat metabolism, 172
Fats (*cont.*)
lecithins and cephalins from elaidic acid, 172
lipogenesis, 163
of liver, 407
of lymph, 169
mechanism of absorption, 168
metabolism, 163
methionine and fat metabolism, 177
nervous regulation of metabolism, 180
nutritive value and digestion of, 165
ox-depot, 166
oxidation of fatty acids, 172
ω-oxidation, 174
pathological inhibition of absorption, 181
periodicity in metabolism, 164
production of ketone bodies, 175
proportion burned during fasting, 164
relation of thyroid to blood lipids, 170
role, in the metabolism of whole body, 163
of ketone bodies in intermediary fat metabolism, 173
of lungs in fat metabolism, 176
skin lipids, 167
synthesis of, 167
of fatty acids to neutral fats, 171
transportation in blood, 171
of tubercle and lepra bacilli, 166
use of isotopes in study of metabolism, 171, 172
vitamin B_1 and metabolism, 177
Fats and oils
of acorn, 82
of *Ailanthus glandulosa*, 80
alcohols and hydrocarbons from, 95
of angel fish, 89
animal, 85
of aquatic fauna and flora, 87
of *Atropa belladonna*, 82
of banana, 83
of beechnut, 79
of black walnut, 81
of brown trout, 89
of carp, 87
of catfish, 89
of Ceylon lizard, 86
of chrysalis, 85
of *Citromyces Sp.*, 82
of codliver, 87
component glycerides, 77
conjugated double bonds, qualitative test for, 85
of *Datura stramonium*, 82
diene value, 84
of dogfish, 88
essang oil from *Ricinodendron africanum*, 78
fatty acids, 90

Fats and oils (*cont.*)
of goat-milk, 86
of gorli, 84
of Grandilla passion-fruit, 83
of halibut, 89
of *Hyoscyamus niger*, 82
of Java kapok, 81
of lampern, 89
of milk, 86
of oiticica, 81
of ox-blood lipids, 85
of peanut, 95
of Philippine lumbang, 83
of Philippine physic nut, 80
of Philippine tobacco-seed, 80
phosphatides, 89
of pilchard oil, 87
of plum pit, 79
of poke root, 79
of pollock, 89
progressive changes in, 77
of *Quercus incana*, 82
of *Quercus palustris*, 83
of raspberries, 96
of ratfish, 89
of *Ricinus zanzibarinus*, 78
of salmon, 89
of sapucainha oil, 84
of sea trout, 89
of shark, 88
of skunk, 86
of *Solanum xanthocarptum*, 79
of sperm-whale, 87, 96
of *Telfairia pedata*, 81
of tent moth, 85
of tung, 80
of tunny-liver, 87
of turbot, 89
vegetable, 78
waxes, 94
of whale, 87
of wheat germ, 80
of *Xanthium strummarium*, 78
of yeast, 82
Fatty acids
bromination, 91
diene value, 92
effect of potassium hydroxide on absorption spectra, 93
monohydroxypalmitic acid, 90
oxidation of, 28, 91
oxidation of unsaturated, 28
punicic acid, 90
Female hormones, 272
Fermentation
bacterial, 503
butyric, 499
lactic acid, 502
oxidative, 503
propionic, 500
Ferriheme chloride, 426
Ferriheme hydroxide, 426
Ferrihemoglobin and derivatives
magnetic moments of, 111
nature of iron in, 426
Ferroheme, 425
Ferrous hemochromogens, 425
Fichtelite, structure of, 460
Ficin proteinase, 37, 43
Filtrate factor, 314, 315, 316
Flavinphosphoric acid, cure for Gee-Herter's disease, 181
Flavins
lactoflavin, 439
synthetic, 440
Fluorescence spectra of porphyrins, 423
Forage-grass proteins, 115
Friedelin, 470
Fructosans, 68
Fucosterol, in *Sargassum* weed, 340

G

Galactoaraban, 71
Galactocarolose, 70
Galactogen, 67
Gall stones, composition of bile and, 415
Gastric acidity, blood calcium and, 245, 246
Gastric juice, influence of fats on production of, 165
Gizzard-erosion factor, 348
Glass electrode, 234
Gluconic acid from glucose, 503
Glucose, oxidation by enzyme preparation, 28
Glucose-1-phosphoric acid, 138
Glucose-tolerance, 149
d(—)-Glutamic acid, from *Bacillus mesentericus vulgatus*, 104
Glutamine, determination of, 106
α-Glutamylcysteinylglycine, synthesis of, 101
Glutathione
catalysts for oxidation of, 14
content of the liver, 412
effect in Pasteur reaction, 24
in lactic acid formation, 26
metabolism of, 197
stability of ascorbic acid and, 326
Glyceraldehydephosphoric acid, 135
Glycerrhetic acid, 467
Glycine
dispensability in nutrition, 356
estimation with nitranilic acid, 106
therapeutic use of, 220
Glycogen
chain length of, 66
of fish liver, 66
formula for, 67
glycogenic substances, 152

Glycogen (*cont.*)
glycogenolysis, 153
of horse muscle, 377
methylation, 66
of *Mytilus edulis*, 66
phosphorylation of, 382
of rabbit liver, 66
storage, 153
structure of, 66
Glycogenase, from liver, 409
Glycogenesis from amino acids, 192
Glycogen precursors, in liver, 401
Glycolysis
catalysis of, 391
cozymase action in, 381
effect of organic mercury compounds and iodine on, 391
of muscle, 381
new coenzyme factor in, 381
Glycoproteins, 118
Glycosides, chemistry of, 51
Gonadal hormones, effect on renal sodium excretion, 264
Gonadotropic hormones
antagonist hormone, 285
augmentation of response to gonadotropic preparations, 286
effect on ovulation, 285
follicle-stimulating, 284
interstitial cell stimulator, 285
luteinizing, 284
from pregnant mare serum, 285
Gonads
effect on creatine metabolism, 224
influence on cholesterol metabolism, 184
Gonococcal vaginitis, beneficial effect of oestrin treatment, 276
Graminin, 69
Growth regulators in higher plants
auxin group, 513
bios group, 525
Guanidinoacetic acid in creatine metabolism, 219
Guanineuracilic acid, 139
Gums, 72
Gypsogenin, 463, 464

H

Hae-, *see* He-
Heart, creatine content of, 213
Hederagenin, 463, 464, 466
Helicorubin, 428
Hematin
compounds of, 425
of cytochrome-*a*, 433
of cytochrome-*c*, 432
growth of bacteria and, 491
heme, 425
hemin, 426
Hematin (*cont.*)
hemochromogens, 425
linkage to iron and nitrogenous substances, 425
metal compounds, magnetic susceptibilities of, 425
parahematin, 426
protohematin, 433
of *Spirographis*, 433
verdohematin, 433
Heme, 425
Heme compounds, paramagnetic susceptibility of, 11
Hemicelluloses
galactose series, 69
glucose series, 69
origin of, in wood, 72
Hemin, 426
Hemochromogen systems, oxidation-reduction potentials in, 10
Hemocyanin, 115
Hemocyanins
copper in, 437
molecular weights of, 437
pH-stability range, 437
Hemoglobin, 115
absorption spectra and structure, 427
amino acids of, 428
availability of iron for regeneration of, 371
carbon monoxide-hemoglobin, 426
degree of oxygen saturation, 10
derivatives, 426
determination of carbhemoglobin, 429
differences between foetal and adult, 429
dissociation of, 429
formation by liver, 411
from globin and protohematin, 118
heme-protein linkage, 427
kinetics of oxidation to methemoglobin, 429
methemoglobins, nature of iron in, 426
oxyhemoglobin, 426
dissociation of, 429
reaction with nitrite ion, 9
reactive sulfhydryl groups in, 428
reversible denaturation of, 429
of various animals, 428
Hemoglobin-*c*, 432
Hemoglobin disintegration, porphyrins as intermediates in, 423
Hesperidin, as vitamin P, 332
Hexosediphosphoric acid, 134, 135
Hexosemonophosphate, oxidation of, 27
Hexosemonophosphoric acid, 129
α-Hippuryllysineamide, 101
Histidine, deamination of, 103
d-Histidine, conversion to *l*-histidine by rats, 104

Hormones
of the adrenal cortex, 253
anterior hypophysis, 284
antihormones, 289
corpus luteum, 277
effect on menstrual cycle, 281
female, 272
glycotropic, 292
gonadotropic, 284
lactogenic, 287, 292
male, *see* Male hormones
oestrogens, 272
ovarian, 272
pituitary, 18, 284
testicular, 266
Hydnocarpic acid, 92
Hydrocelluloses, 56, 57
Hydrogen electrode, 233
Hydrogen peroxide, activation by hemins, 12
Hyperglycemia, post-insulin, 148
Hypophysis
effect on creatine metabolism, 224
fat metabolism and, 179
ketogenic principle of the anterior lobe, 405
role in carbohydrate metabolism, 143
Hypoxanthine, as an intermediate in synthesis of uric acid, 201

I

Imidoporphyrins, 421
Immuno-polysaccharides, 73
β-Indolyl-acetic acid
effect on root growth, 522
physiological effects of, on higher plants, 524
Insecticides, organic
nicotine and related compounds, 484
pyrethrins, 478
quassin, 483
rotenone group, 473
Insulin
absorption from the stomach, 152
antiketogenic effect of, 405
diminution of cerebral glycogen by, 150
effect on glycogenesis and glycogenolysis in liver, 399
formation of sulfhydryl groups in, 25
heightened gastric motility following injection of, 151
hyperinsulinism, 151
hypoglycemic convulsions, mechanism of, 150
in the oxidation of carbohydrate, 144
protamine insulin, 151
requirement of the body, 149
use in treatment of schizophrenia, 151
Insulin-protamine compounds, 118
Inulin
formula for, 68
molecular size, 67
Irisin, 69
Iron, dietary deficiency, 367
Iron metabolism, 362
Isoequilin, 272

K

Keratin, 114
α-Ketoglutaric acids, as intermediary link between carbohydrates and amino acids, 193
Ketonic acids
acetoacetic acid, 27
acetopyruvic acid, 27
dismutation of, 26
interaction with amino acids, 27
α-ketoglutaric acid, 27, 193
phenylpyruvic acid, 27
pyruvic acid, 26
synthesis of carbohydrate from, 26
α-Ketonic acids, transfer of amino groups from amino acids, 189
Ketosis, 175
Kidney
respiration of normal and scorbutic, 16
role in deamination of amino acids, 191

L

Lactalbumin, 118
Lactic acid
biological racemization of, 506
blood content during exercise, 394
fermentation of, 502
precursor of, 26
rate of removal during exercise, 394
Lactic acid formation, role in aërobic metabolism, 391
Lactoflavin, 4, 133, 318
in cytoflav, 439
in human milk, 439
in livers of adrenalectomized rats, 262
visual purple and, 440
in yellow enzyme, 439
Lactogenic hormone
anti-gonad action of lactogen, 288
crystalline, 287
initiation and maintenance of lactation after hypophysectomy, 288
response to disuse of mammary glands, 289
from sheep pituitary, 287
Lanigerin, 442
Lecithin, 89
absorption from frog intestine, 172
Leprosy bacilli, lipids of, 495
Leucine, methionine-free, 108

Leucopterin, 441
Levan
  chain length of, 68
  formula for, 68
Linoleic acid, 92
Lipid metabolism, in liver, 402
Lipids
  of avian tubercle bacilli, 494
  of blood, 170
  effect of choline on metabolism in liver, 402
  of human tubercle bacilli, 495
  of leprosy bacilli, 495
Lipoidoses, 182
Liver
  accumulation of fat, 176
  adrenalectomy and glycogen storage, 401
  amino acid metabolism as liver-function tests, 407
  amino acids and glycogenesis, 400
  ascorbic acid and liver glycogen, 399
  blood flow of, 412
  in carbohydrate metabolism, 148
  carbon monoxide poisoning and liver glycogen, 402
  carotenoids of, 410
  copper content of, 411
  daily variations in fat, 407
  deamination of amino acids, 408
  effect, of adrenalectomy, 406
    of cholesterol on fat, 402
    of choline on lipids, 402
    of choline on respiratory rate of rat-liver slices, 404
    of cystine on fat deposition, 403
    of diet on phosphate compounds in, 406
    of dietary factors on fat deposition, 404
    of hypophyseal extracts, 406
    of hypophysectomy and pancreatectomy, 406
    of injections of amino acid mixtures into portal vein, 409
    of insulin on glycogenesis and glycogenolysis, 399, 400, 401
    of pancreas on fat storage, 404
    of starvation on neutral fat fraction, 407
    of various substances on carbohydrate metabolism, 402
    of vitamin B on liver fat, 407
  enzymes and enzyme systems of, 409
  fat, composition of, 407
  fatty acids after ingestion of fats, 407
  fatty degeneration and infiltration, 404
  glutathione content of, 412
  glycogen of, 399
  glycogen precursors, 401
Liver (*cont.*)
  glycogen storage after galactose administration, 400
  glycogenase from, 409
  hemoglobin formation by, 411
  hypophysectomy and glycogen storage, 401
  iron content of, 411
  ketogenesis in, 405
  loss of glucose in the fasting dog, 400
    of protein in fasting, 408
  metabolism of inorganic mineral salts, 410
  non-utilization of glucose from perfusion fluid, 399
  protein storage, 408
  respiration of normal and scorbutic, 16
  retention of lactic acid during glucose absorption, 400
  role in bile salt formation and destruction, 414
  sugar content of hepatic blood, 400
  vitamin-A content of, 410
  vitamin-C content of, 410
  vitamin D and liver function, 411
Liver disease
  amino acid and ammonia metabolism in, 205
  creatinuria and, 215
Lungs, role in fat metabolism, 176
Lupeol, 469
Lymph fat, 169
Lysozyme, 112

M

Magnesium
  deficiency in diet, 366
  requirement in nutrition, 363
Male hormones
  activators, 267
  compounds related to, 266
  effect, on castration changes in the pituitary, 271
    on female rat, 269
    on output of growth hormone from hypophysis, 271
    on secretion from the pituitary, 270
  excretion of in urine, 268
  inhibition of menstruation by, 271
  method of assay, 267
  prevention of testicular atrophy following hypophysectomy, 269
  secretion by transplanted ovaries, 269
  testosterone, 266
Malignant tissues, protein metabolism of, 206
Manganese, deficiency in chickens, 368
Mannan
  from ivory nut, 70
  from salep, 70
  from yeast gum, formula for, 70

Mannite, oxidation of, by yeast preparations, 28
Mannocarolose, 70
Manool, 462
Manoyl oxide, 462
Margarine, fat-soluble vitamins in, 335
Menstrual cycle
  determination of the time of ovulation in women, 283
  effect of female hormones in, 281
Mental disorders, metabolic studies in cases of, 205
Menthols, stereochemistry of, 451
Menthones, stereochemistry of, 451
Mesobilinogen, 436
Metabolism
  bacterial nitrogen, 507
  of carbohydrate, and liver function, 399
  cellular, role of intermolecular transfer of amino groups in, 189
  of fats, 163
    role of lungs in, 176
  of lipids, in liver, 402
  mechanism of aërobic, 385
    of anaërobic, 381
  of muscle, aërobic, 390
    anaërobic, 390
    effect of acetyl choline on, 390
  of nitrogenous compounds, in liver, 407
  role of fats in, 163
Methemoglobin, formation of, 9
Methemoglobins, nature of iron in, 426
Methionine
  fat metabolism and, 177
  indispensability in nutrition, 356
N-Methyl-3,4-dihydroxyphenylalanine, synthesis of, 100
α-*N*-Methylhistidine, 101
Milk, pasteurization and nutritive value, 371
Minerals, requirements in nutrition, 361
Moulds, metabolism of amino acids in, 195
Mucilages, 72
Muscle
  acetylcholine esterase in, 396
  aërobic glycolysis, 391
  aërobic metabolism of, 390
  aërobic phosphorylation of creatine, 386
  anaërobic metabolism of, 390
  biochemistry of, 377
  blood lactate during exercise, 394
  carbohydrate synthesis from lactate, 389
  catalysis of glycolysis, 391
Muscle (*cont.*)
  chemical changes in working muscle, 393
  chemical composition and architecture of, 377
  chemistry of anaërobic contraction, 384
  citric acid and respiration of, 386
  comparison of pressure and electrical stimuli, 390
  contraction of, 380
  creatine and glycogen as phosphate acceptors, 384
  effect of acetylcholine on anaërobic metabolism of, 390
  efficiency under anaërobic conditions, 390
  elastic system of, 380
  electrical tissue of *Torpedo*, 377
  enzyme system catalyzing anaërobic oxidation-reduction, 388
  exchange of salt and water between muscle and blood, 378
  extra-cellular phase in, 379
  fuel utilized during aërobic work, 392
  glycogen of horse, 377
  glycolysis of, 381
  influence of epinephrine on utilization of glucose in, 396
  lactate and pyruvate in blood and urine after exercise, 395
  mechanism of aërobic metabolism, 385
    of coenzyme-dehydrogenase systems, 387, 388
  myoglobin, function in contraction, 396
  myosin from frog, 379
  non-protein nitrogenous compounds in dog, 377
  octopine, from adductor muscle of *Pecten magellanicus*, 378
  oxidation of alcohol by, 393
  permeability to glucose, 396
  phosphocreatine and phosphoarginine in echinoid jaw, 377
  phosphocreatine and phosphopyruvic acid as phosphate donators, 383
  phosphorus compounds in smooth muscle, 378
  phosphorus content of guinea-pig, 377
  phosphorylation of adenylic acid, 382
  phosphorylation of glycogen or starch, 382
  proteins of, 379
  ratio of phosphocreatine synthesized to lactic acid formed, 383
  role of lactic acid formation in aërobic metabolism, 391
  time relations of oxygen consumption, 395

Muscle hemoglobin, *see* Myoglobin
Mutase, 388
Myogen, composition of, 380
Myoglobin
  carbon monoxide-myoglobin, 430
  of different animals, 430
  dissociation of, 430
  function in contraction of muscle, 396
  reaction velocities with oxygen and carbon monoxide, 430
Myosin
  coagulation of, 379
  composition of, 380
  effect of heat on, 379
  free sulphydryl groups of, 380

N

Narcotics, effect on tissue oxidations, 18
Neoquassin, 484
Nephritis, excess protein in diet and, 365
Neural regulation of carbohydrate metabolism, 143
Nicotinamide, 316
Nicotine and related compounds
  anabasine, 487
  l-anabasine, 487
  analytical methods, 484
  d,l-anatabine, 487
  distribution in the blood, 486
  effect on oestrus cycle of rats, 485
  new insecticidal preparations and their application, 486
  d,l-nornicotine, 487
  related alkaloids, 487
  tobacco smoke, 486
  toxicity to goldfish, 486
  toxicity and physiological action, 485
  treatment of acute poisoning, 486
Nicotinic acid, 316
  growth of bacteria and, 491
  in treatment of canine black tongue, 488
Night-blindness, vitamin A and, 339
Nitrogen, biological fixation of, 508
Nitrogen metabolism, of plants, 206
d-cis-Norcaryophyllenic acid, structure and synthesis, 455
d,l-Nornicotine, 487
Nutrition
  alkaline salt in diet, 368
  amino acid requirements, 356
  arginine in, 356
  augmentation of nitrogen storage by carbohydrate, 360
  availability of food iron, 371
  basal metabolism of animals, 355
  basal metabolism of children, 354
  bromine requirements, 361
  calcium, utilization of, 370
Nutrition (*cont.*)
  calcium dietary deficiencies, 365
  calcium requirements, 363
  cobalt deficiencies, 367
  cobalt requirements, 362
  copper deficiency, 367
  copper requirements, 362
  cystine in, 356
  energy, basal requirement of, 354
  fat deficiency, 365
  fat requirements, 361
  glycine in, 356
  iron deficiency, 367
  iron metabolism, 362
  magnesium deficiency, 366
  magnesium requirements, 363
  manganese deficiency, 368
  methionine in, 356
  mineral requirements, 361
  of monkeys and pigs, 318
  in muscular work, 360
  pasteurization of milk, 371
  phosphorus dietary deficiency, 366
  phosphorus requirements, 363
  physiological effects of deficiencies and excesses, 364
  potassium deficiency, 367
  protein, utilization of, 369
  protein deficiency, 364
  protein excess, 365
  protein requirement, 358
  rate of tissue catabolism, 360
  requirements under physiological strain, 364
  serine in, 356
  sodium deficiency, 366
  storage of nitrogen in the tissues, 360
  urea, partial substitution for protein, 358
  utilization of food energy, 369
  zinc deficiency, 368

O

Obesity, effect of on basal metabolism, 355
Octopine, 99
  from adductor muscle of *Pecten magellanicus*, 378
Oestrogens
  beneficial effect in gonococcal vaginitis, 276
  conjugated oestrogens, 274
  content of serum during pregnancy, 274
  daily excretion, 275
  determination of oestrone, 274
  17-dihydroequilenins, 272
  effect of prolonged treatment with, 275

Oestrogens (*cont.*)
effect on follicular growth, 276
on gonadotropic secretion from the pituitary, 277
on menstrual cycle, 281
on oxygen consumption of anterior pituitaries, 277
esters of oestrone and oestradiol, 273
excretion after injection, 275
inhibition of lactation, 277
isoequilin, 272
α- and β-oestradiol, 272
oestriolglucuronide, 273
synthetic oestrogenic agents, 273
Oestrogens and androgens, effect on the mammary glands, 288
Oestrus, regularity of and protein quality of diet, 370
Oils, *see* Fats and oils
Oleanolic acid, 463, 464, 465
Oleic acid, pure, 12
Ornithine, synthesis of, 100
Ornithuric acid, synthesis of, 100
Ovalbumin, estimation of amide nitrogen, 106
Ovomucoid, 118
Oxaloacetic acid, as intermediary link between carbohydrates and amino acids, 193
Oxidases, 7, 13
Oxidation
of amines, enzymatic, 201
mechanism of, 202
by dehydrogenases, effect of cyanide and pyrophosphate on, 29
of fatty acids, 172
and fermentation, by *Saccharomyces wanching*, 29
and phosphorylation, 23
and reduction, biological, 1
ketonic acids, 26
phosphopyridine nucleotides, 22
sulfhydryl groups in, 25
Oxidation-reduction
coupling with phosphorylation of adenylic acid, 383
enzyme system catalyzing anaërobic, 388
mechanism of coenzyme-dehydrogenase systems, 387, 388
metal complexes, catalase, 7, 11
chlorophyll, 14
cytochrome-*a*, 8
cytochrome-*b*, 7
cytochrome-*c*, 7
dyestuff models, 13
glutathione, 14
heme compounds, paramagnetic susceptibility of, 11
Oxidation-reduction (*cont.*)
metal complexes (*cont.*)
hemochromogen systems, 10
mechanism of catalysts, 11
methemoglobin formation, 9
oxidases, 7, 13
peroxidase, 11, 13
use of polarograph, 12
respiration, 14
reversible systems, activation energy, 6
ascorbic acid, 1
Chlorella oxidation-reduction potential, 2
chloroflavin, 4
dyestuff models, 3
glutathione in, 1
lactoflavin, 4
phthiocol, 2
reductinic acid, 1
rhodoflavin, 4
role of enzyme, 6
semiquinone radicals in, 3
theory of two-step oxidation-reduction, 5
two-step systems, 2
use of polarograph, 2
verdoflavin, 4
yellow enzyme, 4
Oxidation-reduction potential
of acetoacetic acid, 27
of ascorbic acid, 1, 325
of hemochromogen systems, 10
of α-hydroxyglutaric acid, 27
of β-hydroxybutyric acid, 27
of α-ketoglutaric acid, 27
of malic-oxaloacetic system, 19
of quadrinuclear iron complex, 10
of reductinic acid, 1
of *Spirographis* hemochromogens, 433
of sulfhydryl groups, 25
in suspension of *Chlorella*, 2
in suspensions of yeast, 2
of synthetic flavins, 440
Oxidizing enzymes in brain, 16
Oxo-isomerases, 136
Oxycelluloses, 58
Oxyhemoglobin, 426
complex with ascorbic acid, 9
dissociation of, 429

P

β-Pachyman, 70
Pancreas
effect on fat storage in liver, 404
fat metabolism and, 179
influence in blood lipids, 170
Pancreatic trypsins, differentiation of, 102

Papain, 37
crystalline, 43
inactivation by hydrogen peroxide, 43
Papilloma virus, 115
Parahematin, 426
Pasteur effect, 9, 391
Pasteur reaction, 20, 21, 23
effect of cysteine, 24
of glutathione, 24
of oxygen tension, 24
in embryonic tissue, 25
Pasteurization of milk, nutritive value and, 371
Pectin
of beets, 73
molecular length, 73
structure of, 73
Pellagra, 314, 315, 319, 320
Pentdyopent, 436
Pepsin, 39, 114
electro-cataphoresis of, 40
immunological relationships of, 40
inactivation by alkali, 39
by iodine, 39
by ultrasonic waves, 40
properties of crystalline, 39
"protein-free," 41
structure of, 41
Pepsinogen, immunological relationships of, 40
Peptidase, dilatometric method for, 48
Peptides
and polypeptides, 197
synthesis of, 41
see also Amino acids and peptides
Permeability
of muscle to glucose, 396
vitamin P and, 332
Peroxidase, 427
composition and reactions, 13, 431
compounds with other substances, 432
mechanism in oxidation, 11
Phenylketonuria, 203
pH measurements
colorimetric determination, 233
glass electrode, 234
hydrogen electrode, 233
quinhydrone electrode, 233
standardization of, 232
Phosphatides
determination in blood serum, 90
lecithin, 89
in soy-bean, 90
wheat-germ oil, 90
Phosphoarginine, in echinoid jaw muscle, 377
Phosphocreatine, 128, 134
in echinoid jaw muscle, 377
Phosphoglyceric acid, 128
formation by bacteria, 499
Phosphohexomutase, 136
Phospholipids
as intermediates in the synthesis of fats, 171
role as oxygen carriers, 17
Phosphopyridine nucleotides, 22
codehydrogenase I, 22
codehydrogenase II, 22
cozymase, in fermentation, 22
influence of alkali upon, 22
preparation of, 22
triphosphopyridine nucleotide, 22
Phosphopyruvic acid, 128
Phosphorus
dietary deficiency of, 366
requirement in nutrition, 363
Phosphorus compounds
adenylic acid system, 126
aminoethylphosphoric acid, 139
argininephosphoric acid, 134
carbohydrate metabolism and, 128
chemical phosphorylation, 130
cholinphosphoric acid, 139
cocarboxylase, 132
cozymase, 130
dihydroxyacetonephosphoric acid, 135, 136
glucose-1-phosphoric acid, 138
glyceraldehydephosphoric acid, 135
α-glycerolphosphoric acid, configuration of, 137
guanineuracilic acid, 139
hexosediphosphoric acid, 134, 135
hexosemonophosphoric acid, 129
hydrolyzed by cold alkali, 137
inorganic phosphoric acid, determination of, 125
ketohexosemonophosphoric acid, 135
lactoflavinphosphoric acid, 133
in marine algae, 139
of muscle, 377, 378
nuclein phosphorus, determination of, 126
phosphocreatine, 128, 134
phosphoglyceric acid, 128
phosphopyruvic acid, 128
phosphoric acid esters, analysis of, 126
phosphorylating - dephosphorylating coferment system, 127
phosphorylation with inorganic phosphate, 129
in plants, 139
propionic fermentation and, 501
of starch, 139
triosephosphoric acid, dismutation of, 138
triphosphopyridinenucleotide, 132

Phosphorus compounds (*cont.*)
in wheat, 139
yeast nucleic acid, 139
yellow enzyme, 133
Phosphorylation
of adenylic acid, 386
of creatine, aërobic, in muscle, 386
by inorganic phosphate, 384
mechanism of, 128
and oxidation, 23
Photosynthesis, of *Chlorella*, 15
Phthalocyanine, configuration of, 421
Phthiocerol, 494
Phthiocol, 495
Phyllocladene, 461
Phytolaccasterol, 79
Picrocrocin, 450
Pigment, of tubercle bacilli, 495
Pigments
animal, 421
of bacteria, 498
urinary, chromatographic analysis of, 442
α-Pinene, pyrolysis of, 450
dl-Piperitone, synthesis of, 452
Pituitary gland
adrenotropic hormone of, 260
relation of vitamin E to, 346
Pituitary hormone, effect on oxygen consumption, 18
Placenta, dehydrogenases of, 29
Plants, nitrogen metabolism of, 206
Plasma volume, restoration by cortin, 261
Pneumococcus anticarbohydrate, 115
Pneumococcus specific precipitate, 115
Polypeptide, from *Bacillus anthrax*, 190
Polypeptides and peptides, 197
Porphin synthesis, 421
Porphyrazines, 421
Porphyrins
absorption and fluorescence spectra, 423
azaporphins, 421, 422
biological origin, 423
in bituminous products, 424
chromatographic analysis of, 442
clinical investigations, 424
increased excretion in lead intoxication and disease, 424
as intermediates in hemoglobin disintegration and blood-pigment formation, 423
magnetochemical investigation of complex salts, 422
nomenclature, 422
phthalocyanine, 421
porphin synthesis, 421
Porphyrins (*cont.*)
sources of pathological amounts of, 424
uroporphyrins, 423
Potassium, deficiency in diet, 367
Pregnancy, acid-base balance in, 243
Pregnane-3,17,20-triol, 257
Pregnanediol glucuronide, 279
Pregnanolone, synthesis from cholesterol, 278
Procarboxypolypeptidase, 112
Progesterone
from corpus luteum extracts, 278
detection of small amounts, 279
effect on adrenalectomized cats and dogs, 264
on hypophysectomized rabbits, 280
on menstrual cycle, 281
inhibition of ovulation by, 280
suppression of oestrus cycle, 280
d-Proline, in ergot alkaloids, 104
dl-Proline, synthesis of, 100
Propionic acid, formation by bacteria, 500
Protamines, 115
Protein
of acetaldehyde reductase, 46
bacterial formation from amino acids, 507
Bence-Jones, 112, 198
introduction of carbohydrate into, 100
requirements in nutrition, 358
storage in liver, 408
utilization of dietary, 369
of yellow enzyme, 44
Protein deficiency, physiological effect of, 364
Protein metabolism, of malignant tissues, 206
Protein-polysaccharide compounds, 118
Protein requirement, for children, 360
Proteins, 99
acetaldehyde reductase, 112
α-amino-*n*-butyric acid in, 108
aucuba-mosaic virus, 112
of blood-plasma, 198
carboxypolypeptidase, 112
catalase, 112
clupein, 111
creatinuria and, 222
denaturation of, 118
determination of sulfhydryl groups in, 26
diphtherial toxin, 114
enzymatic degradation, 117
erythrocruorins, 115
ferrihemoglobin, 111
films, 119
of forage-grass, 115
hemocyanin, 115

Proteins (*cont.*)
hemoglobin, 115, 428
hemoglobin regeneration and, 198
hydrogen bond in protein molecule, 110
hydrolysis and synthesis, 116
insulin-protamine compounds, 118
isolation and analysis, 112
keratin, 114
lysozyme, 112
metabolism of, 189
molecular weights, 115
of muscle, 379
papilloma virus, 115
pepsin, 114
periodicity hypothesis, 110
physiological effect of excess in diet, 365
plasteins, 116
pneumococcus specific precipitate, 115
procarboxypolypeptidase, 112
protamines, 115
quantity ultracentrifuge, 116
reaction of aromatic diazo compounds, 117
secretin, 113
specificity in enzymatic synthesis, 117
stability regions of pH, 115
structure, 108
synthesized by bacteria, 497
thyroglobulin, 115
tobacco-mosaic virus, 112
ultracentrifugal analyses, 113
visual purple, 439
X-ray diffraction patterns, 119
yellow ferment, 114
Protocrocin, 451
Protohematin, 433
Pterins
biological function of, 441
leucopterin, 441
role in erythrocyte formation, 442
uropterin, 441
xanthopterin, 441
Punicic acid, 90
Purine deaminases, 199
Pyrethrins
behavior on hydrogenation, 480
chemistry, 478
extraction from pyrethrum flowers, 482
fatty acids combined with, 481
isolation of, 478
pyrethrolone, 479, 482
toxicity and physiological action, 483
Pyrethrolone, 479, 482
Pyruvic acid
action of *Clostridium butyricum* on, 27
dehydrogenation of, 27
dismutation of, 26
Pyruvic acid (*cont.*)
formation and removal by embryonic tissue, 27
as intermediary link between carbohydrates and amino acids, 193
oxidation of, 27
synthesis of carbohydrate from, 26

Q

Quassin
chemical properties of, 484
isolation, 483
neoquassin, 484
Quinhydrone electrode, 233
Quinovic acid, 467

R

Redox enzymes, 43
Redox potentials, *see* Oxidation-reduction potentials
Reductase, acetaldehyde, 112
Reductinic acid, oxidation-reduction potential of, 1
Renal disease, alkali therapy in, 244
Renal impairment, acid-base balance in, 243
Respiration
acid-base balance and, 244
action of *p*-aminophenol, 19
of amphibian gastrulae, 16
of bacteria, 15
bacterial, 504
of bakers' yeast, 15
of *B. coli*, 15
of the beaver, 15
in brain, 16
of caffeinized muscle, 19
of cardiac tissue, 16
catalytic role of dicarboxylic acids, 19
of *Chlorella*, 15
citric acid as catalyst for, 20
of echinoderm eggs, 15
effect of adrenaline, 17
of calcium ion, 19
of choline on, in rat-liver slices, 404
of cyanide, 19
of dihydrotheelin, 18
of dyes on, 16
of narcotics, 18
of osmotic pressure, 19
of pH, 19
of phosphate, 19
of pituitary hormone, 18
of substituted phenols, 17
of theelin, 18
of vitamin D, 19
of frog heart, 18
of frog skin, 15
function of yellow ferment, 20
of guinea-pig liver and kidney, 16
in *Limulus* optic nerve, 16

Respiration (*cont.*)
methylene blue-stimulated, 18
of muscle tissue, role of citric acid in, 386
of the newt, 15
oxidation of succinate and effect of inhibitors, 21
Pasteur reaction, 23
in plant roots, 15
role of phospholipids, 17
of sea-urchin eggs, 14
of seedlings of *Lupinus albus*, 15
of vaccinia, 14
Respiratory coenzyme, 132
Respiratory ferment, *see* Yellow enzyme
Respiratory quotient, dependence on lactic acid formation, 392
Retinene, 438
Rhodoflavin, 4
Rhodopsin, 438
Riboflavin
growth factor for lactic acid bacteria, 492
role in carbohydrate metabolism, 156
Rickets
acid-base balance in, 244
due to biliary fistula, 415
phosphatase test in the diagnosis of, 343
Root growth
effect of biotin on, 525
effect of gases on, 524
Rotenone group
apotoxicarol, 474
chromenocoumarins, 476
effect on man and animals, 478
evaluation of rotenone-bearing plants, 478
insecticidal activity of derris and cubé, 477
of insecticides, 473
sumatrol, 473
toxicarol, 473
toxicity to goldfish, 477
toxicity and physiological action, 477

S

Safranal, 450
β-Santalene, 458
β-Santalol, 458
Sapogenins, triterpenoid, 462, 463
Saponins, 449
Schizophrenia, use of insulin in treatment of, 151
Sclareol, 461
Secretin, 113
Semiquinone radicals, paramagnetism of, 3
Senegenin, 468
Serine, dispensability in nutrition, 356
dl-Serine, synthesis of, 100
Serum mucoid, 118
Serum proteins, 118
Sesquiterpenes, 453
Sinistrin, 69
Sodium, deficiency in diet, 366
Sorbose, from sorbitol, 503
Starch
action of amylases on, 63
acylation of, 64
"α-amylodextrin" from, 63
amylopectin, 64
amylose, 64
chain length, 61
chemical unit of, 61
chemistry and constitution, 60
formula for, 62
methylation of, 61
number of units in chain, 64
osmotic pressure measurements, 65
phosphate group in, 63
phosphorylation of, 382
reducing properties, 65
soluble, 65
synthesis of, 65
Stercobilin, 436
Stercobilinogen, 436
Sterols, physiology and pharmacology of, 183
Streptococci, carbohydrates from, 496
Strobinin, 442
Sugar metabolism, disturbances of, and creatinuria, 222
Sulfhydryl groups
autoxidation of, 25
colorimetric determination of, 26
determination of, in proteins, 26
insulin formation, 25
oxidation-reduction potential, 25
Sumatrol, 473

T

Terpenes
ammoresinol, 460
α-amyrin, 469
β-amyrin, 463, 464, 468
artemisia ketone, structure of, 449
γ-atlantone, 458
azulenes, number of, 453
azulenes, structure of, 453
azulenes, synthesis of, 454
basseol, 468
betulol, 457
campherol, 452
camphor, decomposition products of, in the animal organism, 452
β-caryophyllene, structure of, 455
caryophyllenes, 454
cerin, 470
clovene, 456
α-cyperone, 457

Terpenes (*cont.*)
diosphenol, 452
diterpenes, 460
echinocystic acid, 469
erythrodiol, 463, 464
fichtelite, structure of, 460
friedelin, 470
glycerrhetic acid, 467
gypsogenin, 463, 464
hederagenin, 463, 464, 466
lupeol, 469
manool, 462
manoyl oxide, 462
menthols and menthones, stereochemistry of, 451
monoterpenes, 449
d-cis-norcaryophyllenic acid, structure and synthesis, 455
oleanolic acid, 463, 464, 465
phyllocladene, 461
α-pinene, pyrolysis of, 450
dl-piperitone, synthesis of, 452
protocrocin, 451
quinovic acid, 467
safranal, 450
β-santalene, 458
β-santalol, 458
sapogenins, triterpenoid, 462, 463
sclareol, 461
senegenin, 468
sesquiterpenes, 453
surface film measurements of triterpenoids, 468
triterpenes, 462
turmerones, 459
Testosterone
effect of esterification on, 266
effect of mode of administration, 267
Thiamin, *see* Vitamin B_1
Thiochrome, growth of bacteria and, 491
Threonine
configuration of, 104
synthesis of, 99
Thyroglobulin, 115
Thyroid
effect of vitamin E on, 346
effect on creatine metabolism, 223
relation to blood lipids, 170
Thyroxin, 100
Tobacco-mosaic virus, 112
Tobacco smoke, 486
β-Tocopherol, 343
Toxicarol, 473
Triphosphopyridine nucleotide, 22
Triterpenes, 462
Triticin, 69
Trypsin
from blood plasma, 42
coagulation of blood, 42
crystalline, 42
Trypsinogen, activation of, 38
d-Tryptophane, conversion to *l*-tryptophane by tissue, 105
dl-Tryptophane, synthesis of, 100
Tubercle bacilli
carbohydrates of, 496
lipids of, 494
Tumor extracts, destruction of cozymase and adenylic acid by, 23
Turmeric oil, odoriferous constituent of, 459
Turmerones, 459
Tyramine, oxidation of, 28
Tyrosine, oxidation of, 29
Tyrosinosis, 203

U

Unsaturated fatty acids, oxidation of, 28
Uracil, growth of bacteria and, 491
Urea
formation from purines, 200
synthesis from ammonia, 199
Uric acid
reduction by tissues to xanthine, 29
synthesis in birds, 201
Urinary pigments, chromatographic analysis of, 442
Urinary secretion, filtration-reabsorption theory of, 247
Urobilinogens, 436
Urobilins, 436
Uroporphyrins, 423
Uropterin, 441

V

Valine, physiological effect of deficiency in diet, 364
Varianose, 71
Verdoflavin, 4
Verdohematin, 433
Verdohemochromogens, mechanism of formation of, 434
Virilism, adrenal hormones and, 257
Visual cycle, 438
Visual purple, 438
Vitamin A
absorption of, 338
assay of, 337
chemistry, 336
content of liver, 410
crystalline, 336
crystalline derivatives of, 337
etiology of kidney and bladder stones and, 340
human requirements, 339
night-blindness and, 339
storage in the liver, 339
synthesis of, 336
visual cycle and, 439
Vitamin A_2, 338
visual purple and, 439

Vitamin B
effect in carbohydrate metabolism, 155
relation to cocarboxylase, 132
Vitamin B_1
analogues of, 311
bisulphite-binding substances in blood and, 309
catalysis of oxygen consumption, 307
catalysis of pyruvic acid oxidation, 307
chemistry, 310
cocarboxylase, structure and synthesis, 305
determination of, 312
diphosphoric acid ester of, 47
effect of, on alcoholic polyneuritis, 309
on cardiovascular ailments, 309
on human deafness, 309
on liver fat, 407
on production of diphtheria toxin, 498
estimation in tissues, 310
fat metabolism and, 177
function of, in animal metabolism, 306
in yeast metabolism, 306
growth of bacteria and, 491
intermediary carbohydrate metabolism and, 307
metabolism of, 309
micro-organisms and, 312
oxidation-reduction, 5
relation between structure and activity, 310
sparing action of fat, 163
structure, 310
synthesis of, 310
Vitamin-B_2 complex
anemia, 320
B_4, B_6, and the filtrate factor, 315
factor H, 320
factor W, 316
filtrate factor (for chicks), 316
(for rats), 316
lactoflavin, 314, 318
nicotinamide, 316
nicotinic acid, 316
nomenclature, 314
nutrition of monkeys and pigs, 318
pellagra, 319
riboflavin, 314
vitamin G, 314
Vitamin B_2, two-step oxidation-reduction, 4
Vitamin B_3, 315
Vitamin B_4, 314, 315
Vitamin B_5, 315
Vitamin B_6, 314, 315
Vitamin C
autoxidation of, 14
catalyzed oxidation of, 326
chemistry, 325
Vitamin C (*cont.*)
content of liver, 410
deaminating action on amino acids, 326
destruction by visible light, 326
effect on lactic acid production in excised tissues, 16
elimination in bile, 413
excretion of, in sweat, 330
glutathione and stability of, 326
liver glycogen and, 399
metabolism in plasma and urine, 329
methods of estimation, 326
mode of action, 328
oxidation-reduction potential, 325
requirements for health, 331
reversible oxidation of, 1
role in toxic conditions, 328
tissue saturation, 330
Vitamin D
effect on respiration of skin, 19
liver function and, 411
Vitamin-D group
chemical activation of cholesterol, 341
clinical use, 342
in green plants, 340
influence on absorption of calcium, 343
mode of action of, 343
natural formation, 340
natural versus synthetic forms, 342
number of, 341
protective and curative dose, 342
rate of elimination of, 343
relation between calcium and phosphorus intake and vitamin-D requirements, 342
in *Sargassum* weed, 340
source in summer butter, 340
in white sea-bass liver oil, 341
Vitamin E
anti-oxidant power of, 344
assay, 347
chemical studies, 343
durohydroquinone from, 344
effect on thyroid, 346
film-spreading measurements, 344
isolation of the allophanate, 343
oxidation with chromic acid, 345
physiological function of, 345
relation to pituitary gland, 346
in "royal jelly," 347
sexual impulse and, 346
in treatment of abortion, 347
Vitamin G, *see* Vitamin B_2 complex
Vitamin K, chemical investigation, 347
Vitamin P, 332, 442

Vitamins
fat soluble, 335
transportation across intestinal wall, 415
gizzard erosion factor, 348
Vitellomucoid, 118

W

Waxes
from avian tubercle bacillus, 95
of Bing cherry, 94
from grapefruit peel, 95
of *Simmondsia californica*, 94
of wool grease, 94

X

Xanthine, as an intermediate in synthesis of uric acid, 201
Xanthopterin, 441
Xylan, 72

Y

Yeast, effect of iron and copper on growth, 9
Yeast nucleic acid, 139
Yellow enzyme, 44, 114, 133, 439
constitution of, 440
oxidation of malic acid, 45
oxidation of triphosphopyridine nucleotide, 45
oxidation-reduction, 4
purification of, 440
role in carbohydrate metabolism, 156
synthesis of, 440
by micro-organisms, 434

Z

Zinc, dietary deficiency of, 368
Zymohexase, 136